UNIVERSITY OF ALBERTA

CO-MANAGEMENT OF RESOURCES BETWEEN WHITEFISH LAKE FIRST NATION AND THE PROVINCE OF ALBERTA: SOCIAL FORESTRY AND LOCAL-GLOBAL ARTICULATIONS

by

MICHELE J. IVANITZ ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial
fulfilment of the requirements for the degree of Doctor of Philosophy

DEPARTMENT OF ANTHROPOLOGY

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read and recommend to the Faculty of Graduate Studies and Research for acceptance a thesis entitled:

CO-MANAGEMENT OF RESOURCES BETWEEN WHITEFISH LAKE FIRST NATION AND THE PROVINCE OF ALBERTA: SOCIAL FORESTRY AND LOCAL-GLOBAL ARTICULATIONS

Submitted by Michele J. Ivanitz in partial fulfilment of the requirements of the degree of Doctor of Philosophy.

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Dr. Andie Palmer

Dr. Donald Messerschmidt

Date: June 27, 1996

Especially to my husband, Carl
my parents, Bill and Audrey
my grandmother, Nannie
and
my best friends and fellow-travellers, Zachary and Hannah

Abstract

Co-management of renewable resources between First Nations and the Province of Alberta is in its infancy. In 1994, a significant step was taken in making co-management a reality. This was accomplished through the signing of the Memorandum of Agreement and Memorandum of Understanding between Whitefish Lake First Nation and the Government of the Province of Alberta, providing for a deciduous timber permit to Whitefish Lake First Nation and an agreement on a process to consult and cooperate on matters of mutual interest in the co-operative management of forests, wildlife, and fisheries.

This research is a study of process through applied/development anthropology, social forestry, and change. The specific focus was to develop an "Implementation Plan" to facilitate the implementation of the Memoranda.. The development of the Implementation Plan represents a process of dispute resolution - a process which is critical to the success of cross-cultural resource management structures. Unless parties to potential agreements are brought together and accommodations and reconciliations made, there is no possible hope of successful partnerships or resource sharing. In the case of Whitefish Lake First Nation and the Province of Alberta, what is crucial is that in the interest of reaching agreement on a workable and practical resource management Implementation Plan, the stakeholders have come together, putting rhetoric and differences aside and are operating on principles of equality, equity and fairness. The Implementation Plan reflects realistic co-operative management, as through the planning process, scientific, bureaucratic, and traditional ecological epistemologies are reconciled.

This thesis also contains the components of a human theory of development. It is applied theoretical development based on reality as opposed to rhetoric, considerations of power and knowledge, the realities of economic participation and environmental conservation, issues of tenure, and the critical importance of culture in the implementation of decision-making, dispute resolution, the acceptance of responsibility, and the perceptual basis of power equity.

Preface

> Science is a grand thing when you can get it; in its real sense one of the grandest words in the world. But what do these men mean, nine times out of ten, when they use it nowadays? When they say detection is a science? When they say criminology is a science? They mean getting *outside* a man and studying him as if he were a gigantic insect; in what they would call a dry impartial light; in what I should call a dead and dehumanized light. They mean getting along way off him, as if he were a distant prehistoric monster; starting at the shape of his "criminal skull" as if it were a sort of eerie growth, like the horn on a rhinoceros's nose. When the scientist talks about a type, he never means himself, but always his neighbour; probably his poorer neighbour. I don't deny the dry light may sometimes do good; though in one sense it's the very reverse of science. So far from being knowledge, it's actually suppression of what we know. It's treating a friend as a stranger, and pretending that something familiar is really remote and mysterious. It's like saying that a man has a proboscis between the eyes, or that he falls down in a fit of insensibility once every twenty-four hours. Well, what you call "the secret" is exactly the opposite. I don't try to get outside the man. I try to get inside.
>
> G.K. Chesterton, *The Secret of Father Brown*, 1927:12-13.

> Flatheads recognize the exciting nature of lip titillation and are great kissers when affectionate. The kiss is made by applying the lips to those of the beloved, frequently using the tongue but employing no suctional smack. The sex act was performed with the male in the superior position and no alternatives are reported.
>
> Harry Holbert Turney-High, *The Flathead Indians of Montana*, 1937:86.

For the past eleven years I have been working as an applied anthropologist in remote Cree, Oji-Cree, Inuvialuit, Gwich'in, and northern Tutchone communities. I have lived in northern Alberta and Saskatchewan, northern Ontario, five different communities in the Western Arctic, and the Yukon Territory in small communities, fish camps and semi-urban settings. Living and working in highly sensitive political environments for over a decade has taught me not to fear ambiguity and uncertainty, but thrive within them. As a result, I have learned to adapt to a number of cross-cultural settings and develop a strong capacity to move within the spectrum from hunter and trapper to industry company presidents to federal and provincial cabinet ministers and senior government officials. This movement has also included sectoral flexibility in working with not only First Nations, Aboriginal communities and government, but with agriculturalists, hydro developers, commercial fishermen, outfitters, and petroleum producers. My experiences have been varied ranging from the acquisition of diverse skills, including the procurement and processing of seal hides and the setting of salmon weirs, to playing cards for a week while inadvertently becoming a guest of an armed band office occupation, to filling out income tax forms for elderly residents of isolated communities. Running throughout all of these issues and roles have been considerations of gender - methodologically, professionally, and personally.

The past three years have been spent satisfying the academic requirements of a Ph.D. program, part of which has included the examination of many development and co-management models around the world and evaluating their effectiveness. In addition, I have specifically undertaken in-depth research in social forestry and resource co-management with First Nations, the Government of the Province of Alberta, and the forest industry. This work has led to the development of a co-management implementation plan based on Canadian and international management models from a number of resource sectors. This implementation plan is intended to be used by both the Province of Alberta and Whitefish Lake First Nation in the establishment of working procedures for co-operative resource management. The necessity of establishing strong linkages between industry, government, and the university in the development of research and educational opportunities that are relevant in today's business-oriented climate is very clear, and efforts have been initiated to further this process.

I note these autobiographical facts to show that this thesis is not based only on the three years I have spent in the Ph.D program at the University of Alberta, but also on over a decade of living and working in the field and is derived in large measure from personal experience. I am not making these statements in the vein of the "young Turk" set on wreaking havoc with established order. That is not my intention. I am simply putting forward an alternative approach to much applied anthropological thought.

I have spent my entire adult life "in the trenches" as it were, observing and participating in cross-cultural political, economic, social and family life at a community level. What I learned through my early experiences is that people are people - whether they are Inuvialuit, Cree, Irish or of unknown ancestry. As people, we all possess both the positive and negative aspects of human character. No single group of individuals has a monopoly on family values, sharing, equality, or other aspects of life that our liberal-democratic views would term positive. In the same vein, no one group of individuals has a monopoly on political maneuvering, criminal activity, substance abuse, or exploitation. Power and knowledge play themselves out throughout all sectors of a society, among societies, and between societies. They play themselves out through the individual members of these societies. They play themselves out through that most sacrosanct embodiment of the intersection of concept and reality - culture.

The essence of traditional anthropology is to do an ethnography of the collectivity. This approach, however, begs many questions such as: is there such an entity as the collectivity; and what are the criteria for inclusion in a descriptive category such as "stakeholder", "Cree", and "government bureaucracy"? If the "collectivity" does exist, what are the assumptions we make about the relationship between individuals and the collectivity which are not empirically observable? Do we assume that people with whom we work behave and interact as members of the collective category to which we have assigned them - in other words, do we assume cultural determinism? This raises a much larger question about homogeneity and variability within groups, an even larger one about individual autonomy, and an even larger one about individual character. The ethical problem we have as applied anthropologists is in our denial of respect for individual autonomy and creativity. The conceptual problem we must face is that we have simplified, and made utterly mechanistic, a process that we know is utterly complex, not demonstrably nor predictably deterministic, and certainly chaotic. As such, my thesis does not fit comfortably within the realm of established anthropological practice of the "Ethnography". Nevertheless, "Culture" runs throughout this thesis in the form of epistemology and approach. The various cultures, as represented by the stakeholders, are reconciled through the Implementation Plan developed through this research process. The understanding of cultural difference and diversity comes through the interaction of the representatives at the discussion/negotiation table and other interactive forums. All the stakeholders give and receive "cultural awareness training" to each other while actually trying to make a process work. It is quite possible to produce a meaningful document, meaningful research, and a contribution to theory outside of the standard mould.

This brings me to the use of theory. As I will clearly note in my chapter providing an overview of the approaches I have chosen for this research, theory is a roadmap that guides us in our research. The question that is relevant in this discussion is the appropriate use of theory and theory appropriate to our uses. Multiple theories can be found that are suitable in application to a single of piece of research. As academics, however, it behooves us to choose wisely. For purposes of my research I have not included the use of cultural ecology, for example, as I find it difficult to agree with notions that direct links between a cultural group and the land can be established. When I first went into the field, the use of this perspective was fresh in my mind. In my free time, I attempted to "ground" this theoretical base in reality. While I benefitted greatly from the discussions I had with Inuvialuit elders on this issue, I learned that the use of this framework is one more way to appropriate knowledge from those who lived on and used the land. And, as we are not able to entertain the prospect of a multi-volume dissertation discussing the relative merits of all theory with possible application to the research problem, it is not possible to consider seriously all theoretical possibilities in this work. To do so is to make the mistake of an inappropriate use of theory.

On the other hand, I have found a body of theory that is included cursorily in this dissertation that I think may prove to be of particular relevance - that of "Public Policy". This material was made available to me three weeks prior to completion of my dissertation by a colleague located in Australia. This body of knowledge will be relied upon extensively in the pursuit of my own "human theory of development", taking into account those actual conditions and behaviours that are in play when attempting to undertake resource management in what is essentially a process of dispute resolution.

In closing, I would like to comment on the nature of conservatism and political party politics. There are no doubt many people (as I have been told on numerous occasions) who assume that a conservative government denotes an obstructionist government that is interested in building a solid foundation only for the further development of "big business" and to the detriment of small communities and small business enterprises. Such, I have found, need not be the case in the Province of Alberta. True conservatism should mean living up to principles of local and rural empowerment and it is ('sees itself as') the absolute antithesis of leftist views of state levelling mechanisms. This dissertation will show - to the surprise of some - the commitment of the Government of Alberta to principles of local empowerment as demonstrated through the co-operative management process that is underway between the Province and Whitefish Lake First Nation. In this case, basic political philosophy has been translated into social, political, and development philosophies.

Acknowledgments

I wish to express my sincere appreciation and gratitude toward those individuals and institutions who have made my research possible. If I have left anyone out, it is not intentionally.

My research was funded by the Canadian Circumpolar Institute and the Network of Centres of Excellence for Sustainable Forestry. The generosity of these institutions provided for not only completion of my fieldwork, but for the opportunity for a unique training opportunity for two Whitefish Lake First Nation students. I would also like to extend my appreciation to the Department of Anthropology for graduate assistantship funding.

My research covered three different stakeholders, and involved substantial time and effort on the part of a number of individuals who are representative of all three groups. Chief Eddie Tallman and Jeff Chalifoux devoted substantial time and effort to paving the way for my research, as well as being active participants in the research process itself. The Whitefish Lake First Nation Elders Advisory Council also must be recognized for the time and effort each individual member put into this research. I also wish to thank Chief Tallman, Jeff Chalifoux, and the members of the Elders Council for many hours of laughter. As one individual said to me, "if you can't laugh, you cry". And a big thank you to Eunice Grey for the chocolate cake.

I would like to thank Dave Knight of Tolko Industries Ltd. for not only his assistance in establishing contacts and gathering maps, but for his heartfelt demonstration of the "new forester" who, indeed, recognizes clearly the value of people in forestry activities. Dave also made tremendous efforts in both action and thought regarding extending the involvement of Whitefish Lake Elders and community residents in Tolko activities. This included hosting the Elders Advisory Council at the OSB mill and taking the time to answer not only questions, but criticism.

I also wish to thank Dave Johnson of the Department of Aboriginal Affairs, Government of Alberta, for his clear views and support for this project. I also wish to note that Dave's sense of humour and three-fork cake did not go unappreciated.

I also would like to thank the MOU Steering Committee members for their support, including Cliff Henderson and Jim Nichol, as well as numerous officials of the Department of Environmental Protection.

There are two participants in this research process who are not only representatives of Aboriginal Affairs, but also are two individuals who have become good friends over the years. I extend my sincere thanks and appreciation to Cliff Supernault, who was instrumental in this research process from its inception. Cliff has been a friend, mentor, and colleague, and the many hours of conversation, coffee, laughter, and lessons in reality will be remembered, as well as practiced, for the rest of my days. The second individual I wish to thank is Cameron Henry. As an outside editor, Cameron was invaluable, as were his insights on political process. As a friend, he provided support when things were not as they appeared to be. As a pool player, he is much better than I am. I wish to extend my appreciation to my friend for his patience, laughter, lattes, and his blatant sense of the ridiculous.

It is customary to thank committee members for their involvement. In this case, I also find it a joy. I appreciate sincerely the very hard work and dedication that each member brought to this project. The unique combination of skills, academic backgrounds, and views of the world held by each individual enhanced this research process. Further, within the parameters of professionalism and academic integrity, many times individuals who were passing outside of closed committee meeting doors would comment on the laughter they heard inside. It is indeed a positive committee experience when all of these features are maintained. Dr. Milton Freeman shared his knowledge and wisdom, as well as his experiences in common sense fieldwork and research planning. Milton also provided guidance and assistance in applied anthropology to me for more than a decade, for which I shall always be thankful. Dr. Dhara Gill brought to my attention issues of development and participation that I found useful both in my research and in consulting work. Dhara also made dependency and modernization theories come alive, which I had not thought possible. I would like to extend my thanks to him for his encouragement and support, as well as for his subtle instruction regarding the meaning of a deadline. Dr. Eloise Murray brought issues of gender to the forefront as well as important lessons in the personal lives of women. Her patience with my search for a niche in the world of gender studies is much appreciated and valued, as is her quick wit and sense of humour. The Chi Chi Banana Company shall not be forgotten. I also would like to thank Dr. Andie Palmer for her unique abilities, for her unique way of seeing the world, and for pointing out the same in me.

Words cannot express my appreciation and my gratitude to my supervisor, Dr. Clifford Hickey. Cliff was far more than my supervisor during this process: he was my mentor, colleague, and primary academic support system. These things were reflected in his constant support and guidance - even when the world would turn upside down for no apparent reason. In addition to this, Cliff managed to draw a solid line between a long-standing field relationship in my role as consultant and my new life in the academic environment of the Department of Anthropology. At times, the transition was not easy, and I thank him for his support and encouragement. There are teachers and then there are those who devote their lives to teaching and, while I know his modesty will not likely provide me the opportunity to state this at his own "Golden Marshalltown", Cliff is truly among the latter. As I said in the opening of this acknowledgment, there are no words to express my thanks - except for, "yes Cliff, there is a dog".

Over the past three years, I have had many conversations with many individuals about my research. I would like to extend my thanks and appreciation to Dr. Ciaran O'Faircheallaigh and Dr. Athol Chase, both of Griffith University, Brisbane. Ciaran provided a new way of looking at my research in terms of theory, while Athol provided another view of resource management that opened the way for innovation. Both individuals provided immeasurable support and encouragement for my work while we were in Baltimore attending the Society for Applied Anthropology meetings. Dr. Ron Ayling of IDRC Canada provided support and encouragement in terms of my research and post-completion, and Dr. Vilia Jefremovas provided her insights, heartfelt friendship, and relaxing evenings of conversation. Ms. Elaine Maloney and Ms. Darlene Bagstad provided wit, laughter, encouragement, assistance, and good conversation. I would also like to thank Paula Donnelly-Roark of the World Bank for her clear stand on the nature of participation.

An individual who has provided many hours of insight and humour is my friend, mentor, and colleague, Dr. Bruce Morrison. Bruce has taught me the value of the past in application to the present and thinking about the future. He brought Fox and Vicos alive in the context of my own research. Bruce also taught the value of turning inward during the fieldwork process, in order to gain better understanding of why we do what we do as applied anthropologists, and as individuals. He also taught me three other very important things: the "old guys" did have some good ideas, always carry your amulet, and be nice to yaks.

For his effort and assistance as my external examiner, I would like to thank Dr. Donald Messerschmidt. Don exerted substantial effort to come to Edmonton from Nepal via Washington for my exam, and it is appreciated sincerely and gratefully. I also would like to thank him for his support and encouragement during my exam, for his public expression of extending our applied world beyond "talking to ourselves", and for the lunchtime lesson in Vietnamese. I never will forget what it means to complicate a situation.

In conclusion, I extend my very special recognition to the love of my life, my husband Carl Ninine. Carl provided invaluable support and encouragement. He understood the intense state concentrated writing brings and constantly fed me, made me coffee and tea, supplied endless cans of club soda, and provided humour and balance. I would like to thank him for taking Zachary and Hannah out when I was too tired, for taking me out for coffee and apple pie when I was too tired, for being on the other end of the telephone when I was in the field, and for being as excited about my research as I was. I also would like to thank him for his unique perspective on the world and my place in it.

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1. The Research Problem

Introduction

Co-operative management of renewable resources between First Nations and the Province of Alberta is in its infancy. In 1994, a significant step was taken in making co-operative management a reality. This was accomplished through the signing of the Memorandum of Agreement and Memorandum of Understanding between Whitefish Lake First Nation and the Government of the Province of Alberta, providing for a deciduous timber permit to Whitefish Lake First Nation and an agreement on a process to consult and cooperate on matters of mutual interest in the co-operative management of forests, wildlife, and fisheries. A Steering Committee was struck composed of members of both government and the First Nation to guide the process[1].

The specific focus of this research is to develop an "Implementation Plan" for submission to the Co-operative Management Steering Committee to facilitate the implementation of the Memoranda. As this research is a study of process through applied/development anthropology, as well as providing a contribution to academic theory, the thesis is constructed in a manner whereby discussion flows in a revolving sequence from the general to the specific to the general.

Chapter Two provides an overview of Alberta forest management, legislative and regulatory structures, policy development, and the Memoranda. It concludes with a "reconciliation" of three epistemological frameworks through co-operative forest management.

Chapter Three provides an overview of the literature surrounding three primary areas applicable specifically to this research: social forestry, epistemology, and land tenure.

---

[1] The Steering Committee consists of the Assistant Deputy Minister of Land and Forest Services, Assistant Deputy Minister of Natural Resource Services, a senior representative of Alberta Aboriginal Affairs and representatives from the Whitefish Lake First Nation. Other representatives may attend to address specific issues. For further reference see Appendix A.

Chapter Four examines the theoretical bases used initially to guide this research: modernization, dependency, and the culture of poverty. Also included is the relevance of dependency and modernization theory to gender. This chapter concludes with a discussion of development as a concept.

Chapter Five discusses the methods chosen for this research process. The chapter concludes with a discussion on problems associated with participation and participatory frameworks in applied/development work, and the implications of gender for conducting this type of research.

Chapter Six then moves from the local articulation of co-operative management frameworks to the global articulation through an examination of models and structures noted elsewhere throughout the world. This discussion focusses on both forest and non-forest sector resource management.

Chapter Seven provides an analysis, outlining in a summary manner common issues, perspectives and management requirements. The use of terms such as co-management, co-operative management and joint management are clarified based on the analyses and my own field research. A definition of management is provided that is suitable for application to the Whitefish Lake - Province of Alberta case study. This discussion concludes with reference to the "structural re-connect", a concept recently noted in African research, and its relevance to the Whitefish Lake - Province of Alberta co-operative management process.

Chapter Eight focusses specifically on the local context: the culmination of the research process through the development of a co-operative management "Implementation Plan", which is intended to be used as the basis for discussions pertaining to implementation by the Steering Committee. This Chapter represents the applied nature of this research.

Chapter Nine, the concluding chapter, notes the contribution of this research process to academic theory. Future research considerations, particularly in the area of gender, are provided in a Postscript.

2. The Stakeholders, Policy Conflict, and Reconciliation

Anthropology is a field that celebrates complexity and ambiguity in a world looking for simplicity and clarity. In addition, we anthropologists tend to discuss epistemology and method in terms often incomprehensible except to people trained just like we have been. Thus, our response to an outsider's interest in ethnography may be so loaded with anthropological presuppositions and terminology that our audience reacts with glazed eyes at best...Our unwillingness to discuss the tradition in ways that accommodate the discourse of others strikes me as closed-minded, premature, and conservative, not to mention unimaginative. It is also self-defeating for those ethnographers who hold to the goal of putting their knowledge to use...Applied anthropologists have known for years that what they do is part of a larger social and political process, an implementation of some ethnography in a context that features many other persons, agendas, and kinds of knowledge.

Michael Agar, "Show it, don't tell it: how to run an ethnography appreciation course". In: *Practicing Anthropology* 18(2) 1996:3-5.

In early September 1987, the editor of the *Christian Science Monitor* dispatched J. Denis Glover to cover an Indian happening in Concord, Massachusetts, reported on the seventeenth of September under the title, 'How the Founding Fathers took a page from the Iroquois book'. The piece opens with melodramatic phrases, "The pines and the hemlocks murmur in the breeze...as Slow Turtle and Medicine Story quietly walk side by side..." In this fashion, the Indian - here a duo with Indian-sounding names - is placed squarely in rustic nature. The phrasing, however, is borrowed from James Wadsworth Longfellow's *Evangeline*, suggesting that the writer had the Indian confused with the Acadians tragically deported from Nova Scotia in 1755...

James A. Clifton, "Alternate identities and cultural frontiers". In: *Being and Becoming Indian* 1989:8-9.

It must be realized that there is nothing more difficult to plan, more uncertain of success, or more dangerous to manage than the establishment of a new order of government; for he who introduces it makes enemies of all those who derived advantage from the old order and finds but lukewarm defenders among those who stand to gain from the new one. Such a lukewarm attitude grows partly out of fear of the adversaries, who have the law on their side, and partly from the incredulity of men in general, who actually have no faith in new things until they have been proved by experience.

Niccolo Machiavelli, *The Prince*, 1966:27.

Introduction

This chapter provides a foundation for understanding the Whitefish Lake-Government of the Province of Alberta co-operative forest management process through: a brief description of the stakeholders; a review of the forest management context of Alberta; a discussion on the legislative framework representing what I term the "technocratic epistemology" demonstrated through area-based management and volume-based management structures; and a discussion on the convergence of the technocratic, scientific, and traditional ecological knowledge bases through the forest management planning process of Whitefish Lake. Concluding the chapter, I shall link the above to the implementation of the Whitefish Lake - Government of the Province of Alberta Memoranda of Agreement and Understanding.

The Stakeholders, Policy Conflict, and Reconciliation

There is a substantial body of literature on the management of forests in Canada, based on an equally substantial constitutional history that has a direct impact on Alberta forest management. Howlett (1995), Moen (1991) and Ross (1995) provide useful analyses of a very complicated legislative, political, and constitutional environment. Ross (1995) does so through the distinction between natural resource policy networks (whereby membership is based on material interests and the generation of surplus from natural resource activity), and the natural resource policy community (composed of those who are not members of the extractive network). Ross (1995) and Howlett (1995) note two very different sources of political tension and conflict in sectoral policy-making: conflict within policy networks as the material interests of actors conflict; and conflicts between policy networks and policy communities, as members of policy communities demand a voice within policy networks. Change may not occur until the position of those in the network has been undermined by some external economic or political shock. Major disagreement over policy goals will cause tension between the partners and may tempt them to "recruit allies from the wider community, thereby politicizing technical forest management disputes" (Ross 1995:73). Such disagreements render the policy network less effective, but may provide the only serious opportunity for significant change in forest policy paradigms. To bring about policy change, the networks themselves need to be transformed. In the case under discussion, this transformation appears to have begun through the signing of the Whitefish Lake-Government of the Province of Alberta Memoranda of Agreement and Understanding.

Whitefish Lake First Nation and the Province of Alberta[2]

The Whitefish Lake Reserve (IR 155, 155A, 155B) is located on the west and north shores of Utikuma Lake approximately 90 kilometers northeast of High Prairie, Alberta[3]. The reserve falls within the federal electoral district of Athabasca, and the total land area is approximately 4,701 hectares. Membership totals approximately 1,400 - one-half of whom live on-reserve. The Whitefish Lake Band adhered to Treaty Eight in 1901 and the reserves at Utikuma Lake were created in 1908. The First Nation did not receive all of the land it was entitled to at that time and a treaty land entitlement claim was submitted to the Government of Canada[4]. This claim was validated in April, 1986 and subsequent negotiations with the Province of Alberta resulted in a Memorandum of Intent in November, 1988[5]. This Memorandum contained a clause indicating the Province of Alberta and Whitefish Lake First Nation would enter into discussions on co-operative approaches to wildlife and fisheries management in an area surrounding the Band's reserves.

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[2] The usual process to follow in a dissertation is to undertake an extensive ethnographic description of the "native" component of the research. While I may be accused of "anthropological heresy", it is not my intention to provide this description, in other than a very brief, summary manner for three reasons: 1. the applied purpose of this research was not to undertake the construction of a Whitefish Lake ethnography but to arrive at a process for the development of a co-operative management implementation plan to facilitate implementation of the MOU and MOA; 2. inclusion of an extensive review of ethnographic literature could actually harm this research process. What is useful is the convergence of academic and applied thinking in the development of a set of implementation working procedures that reconcile Aboriginal and non-Aboriginal institutions of management; and 3. this research is the result of treating the stakeholders in an equal manner. As such, devoting an extensive discussion to Cree culture to the neglect of the same discussion regarding organizational culture, industrial culture, etc. is not appropriate to this research, is beyond the scope of this research, and may create hard feelings that nullify any positive effect of the research. For further reading regarding relevant ethnographic material, the reader is encouraged to see Berkes (1980, 1984, 1987); Brightman (1993); Brody (1981); Clifton, ed (1989); Elberg et al (1975); Feit (1984, 1986, 1988, 1995); Gosse (1995); Green, ed (1986); Leacock (1995); Morrison (1977); Morrison and Wilson, eds (1995); Ray (1984); Ray and Freeman (1980); Reid (1985); Ridington (1995); Rogers (1961); Tanner (1979, 1983); Wacquan (1986); Wills (1984); and Wilson (1995).

[3] See Appendix U.

A final agreement on the treaty land entitlement was reached in January, 1990 that includes a land component of 5,500 acres as well as cash payments from Canada and Alberta[6]. Discussions between Alberta Environment Protection, Alberta Aboriginal Affairs and the Whitefish Lake First Nation on co-operative approaches to wildlife and fisheries management commenced in early 1994. A Memorandum of Agreement and a Memorandum of Understanding (MOU)[7] were signed on December 12, 1994 including the co-operative[8] management of forests and providing a deciduous timber permit to Whitefish Lake First Nation. Under the umbrella of a co-operative management agreement other related components may be put in place depending on the circumstances and objectives of the parties - such as a timber allocation, measures to assist a First Nation in taking advantage of area economic opportunities, or measures to address traditional land-use sites[9]. The following comments made by the Honourable Ty Lund, Minister of Environmental Protection, at the signing of the Memoranda are noteworthy:

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[4] For a comprehensive and readable analysis of Aboriginal title, the content of Aboriginal title within a framework of ownership versus traditional use, the constitutional limitations of the extinguishment of Aboriginal title, and validity of resource dispositions and the enforcement of Treaty Land Entitlement, see Richard H. Bartlett, *Resource Development and Aboriginal Land Rights*, 1991.

[5] See Appendix B.

[6] See the *Treaty Land Entitlement Settlement Agreement Between Her Majesty the Queen in Right of Canada and The Whitefish Lake Indian Band #459* (1990).

[7] See Appendix A.

[8] Co-operative management is defined in the following way by the Government of Alberta: an agreement between the province and a First Nation, First Nations or an Aboriginal community establishing a process of consultation and co-operation on natural resource or environmental matters of mutual interest. Industry and other stakeholders may also be parties. Whitefish Lake First Nation is in agreement with this definition.

> ...The Memorandum of Understanding is a significant achievement as it is the first agreement of its kind in the province between the government and the people of the First Nation. I think today illustrates that nothing is impossible when understanding and respect are present when negotiating issues of mutual interest. Using a process that is based on consultation and co-operation, this agreement will serve as a model for discussions with other first nations. This agreement does more than secure a timber supply, it will fully integrate timber harvest operations with local forest companies and maximize the forest resource. It also provides the First Nation an opportunity to become directly involved in fisheries and wildlife management. The signing of this agreement fulfills the two major commitments made between Environmental Protection and the Whitefish First Nation: to enter into a wood supply agreement; and to promote opportunities with the deciduous operator in the region for expanded economic opportunities...Through our partnership, we have not only planned a strong future for forest management in the area, but have secured a prosperous future for the people of the First Nation. It is an opportunity for young people to remain in their communities and make a strong contribution. It is an opportunity to develop new business ventures, while strengthening and stimulating the economic prosperity of existing businesses in the area (Speech Notes for the Honourable Ty Lund, Minister of Environmental Protection, December 12, 1994).

Since the signing of the MOU, work has been progressing to address a number of natural resource and environmental issues. Although implementation is still at an early stage, a very positive relationship has been established.

Whitefish Lake First Nation and Tolko Industries Ltd.

Tolko Industries Ltd. is a privately owned corporation. Its primary business is the marketing and manufacturing of solid wood, panel, and specialty products.

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[9] These issues are addressed in Chapter Eight in the "Implementation Plan".

Tolko operates an oriented strand board (OSB)[10] mill in High Prairie, Alberta, which utilizes the hardwood fibre supplied through the Whitefish Lake deciduous timber permit, as well as other sources. In consultation with Whitefish Lake, Tolko has prepared the preliminary and final annual operating plans for integrated management of both the Whitefish Lake deciduous timber permit and the Tolko deciduous timber agreement in the FMU S9[11]. Once these plans are approved Tolko is responsible for completing the associated fieldwork, such as delineating boundaries of cut and reserve areas, road layout, and site rehabilitation. Tolko also facilitates First Nation access to resources that can assist both Tolko and Whitefish Lake in terms of long term strategic planning. Both Tolko and Whitefish Lake, for example, rely on the services of Silvacom Ltd. which is a forestry consulting firm specializing in allowable cut analyses[12].

Tolko Industries Ltd. plays a major role with Whitefish Lake First Nation in forest management planning in the S-9 area, as well as being considered a stakeholder in the co-operative management process.

Whitefish Lake - Alberta Co-operative Forest Management

The Memorandum of Agreement signed December 12, 1994 provides for the utilization of the deciduous timber resource of Township 80 Range 9 to 11,

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[10] Oriented strand board is a composite panel board product manufactured from aspen and poplar (and some other species of wood found in other locations). Aspen and poplar are harvested and transported to the manufacturing plant where eight foot lengths of wood are fed into the manufacturing process. The logs are moisturized for removal of bark and small rectangular strands (6-10 cm long) of wood are cut from the logs, then dried, oriented into a continuous fibre mat with phenolic resin and waxes, and pressed together to form large panels of various thicknesses. The panel is cut to primarily 4' x 8' and 3' x 6' dimensions and prepared for shipment to markets in North America and Japan.

[11] This refers to "Forest Management Unit Slave Lake Pulp and Paper Co. Area 9". This is the forest management system developed by the Province of Alberta. See map Appendix C.

[12] The author would like to note that Silvacom has substantially assisted this research through the provision of large-scale maps (quarter section volumes, volume sampling strata, age class distribution and others) for use in community consultations. The company also provided assistance to the author in the collection and collation of aerial photographs of the reserve area covering 1942-1995.

Township 81 Range 9 to 11, Township 82 Range 10 to 12, west of the 5th meridian[13]. The reserve lies in the mid Boreal Mixedwood Ecoregion[14] and includes the tree species aspen, balsam poplar, white birch, lodgepole pine, white spruce, black spruce, tamarack, and balsam fir[15]. The Whitefish Band falls in the following[16]:

> The modal community of this ecoregion is stands of aspen and balsam poplar, associated with rose, fireweed, bunchberry and wild sarsaparilla. Balsam poplar is more common on imperfectly drained sites. Successional stands of white spruce and balsam fir are less common due to the prevalence of forest fires. Black spruce dominates on poorly drained sites and is associated with willows and sedges. Jack/lodgepole pine prevail on well to rapidly drained sites and may be associated with blueberry and common bearberry (Silvacom 1994b:A-2).

In order to have a clear picture of the importance of this timber allocation to not only Whitefish Lake, but to the overall process of co-operative forest management in the Province of Alberta, it is necessary to have an understanding of context.

The Context of Alberta Forest Management

Moen (1990) notes that prior to Alberta joining Confederation, settlers saw the forest as their enemy as it hindered farming and ranching: trees were to be cut or sold. This cutting occurred until the early 1900s, at which time the Government of Canada noted that the forests in Europe had been "mined" resulting in floods, drought, and economic ruin. Consequently, the concept of sustained yield forest management was instituted in the 1920s[17]. By this time, Alberta had become a province and, following the enactment of the *Natural Resources Transfer Agreement, 1930,* the forests of Alberta became Alberta's to manage, along with the rest of the natural resources[18]. Today, the forests on Crown land in Alberta are owned by the Crown in right of Alberta, and the Province holds the dual responsibility of owner and regulator of its forest resources. At times, these dual responsibilities are contradictory as noted by Moen:

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[13] The reader is reminded that the MOU covers the entire S-9 management area, and not just the townships noted in the MOA.

[14] This is noted in the *Whitefish Lake Forest Inventory* (1994a) based on Strong and Leggat's *Ecoregions of Alberta* (1992).

[15] For understory species of the Mid Boreal Mixedwood Ecoregion noted in the *Whitefish Lake Forest Inventory* (1994) see Appendix D.

[16] For extensive discussion on the mid-boreal mixedwood ecoregion, see Strong and Leggat (1992) pp.37-40.

> An owner usually wants to get the best economic return from his commodity, in this case, timber. A regulator must take into account public interest factors relating to the resource, such as environmental concerns and resource renewal, and must also consider dimensions of the forest other than timber such as watershed management and protection of wildlife. Alberta must therefore balance the advantages of economic return to the people of the province with its regulatory responsibility for protecting the forest resource (1990:5).

The Province of Alberta regulates resources through legislation, including statutes and regulations[19]. There is a substantial number of Acts, regulations, and policies that determine the management of Crown forests in the province of Alberta. A substantial review of all of all of these documents is well beyond the scope and intent of this dissertation[20], as is a review of all policies and terminological distinctions; however, a review of the primary legal schemes pertinent to this dissertation is included.

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[17] Moen (1990) points out that while the 1901 system of one tree for every one cut was set up across the prairies primarily for planting windbreaks around homesteads, the Alberta institution of sustained yield management in the 1920s was a result of a forest management program for a coal mine, which required a perpetual supply of wood.

[18] The *Constitution Act, 1867* grants jurisdiction over the forestry sector to the provincial governments. Howlett (1995) and Ross (1995) note that this arrangement was, in itself, a subject of political conflict and represented a compromise between federal and provincial interests in natural resource management. The Judicial Committee of the Privy Council of the House of Lords in the British Parliament made several rulings on federal-provincial government natural resource disputes immediately following Confederation in 1867.

[19] There is a substantial difference between statutes and regulations. In the case of statutes, law is enacted in the legislature after public debate and reflects the written will of the legislature, expressed according to the forms necessary to constitute it as the law. In the case of regulations, they are generally enacted by cabinet without public debate. Regulations do, however. have the force of law issued by the executive authority of government, and are made to carry out the intent of the law.

The Legislative Framework: Technocratic Epistemology

Noted by Moen (1990), the *Forests Act* sets out mechanisms by which Alberta may dispose of its timber. Alberta has the total bundle of rights relating to the forested Crown land - including ownership of the timber. The *Forests Act* sets out the methods by which the province can dispose of timber. It must be remembered that the *Forests Act* does not allow the Minister to sell forest land outright, he can only "license" individuals or companies to remove timber from the Crown owned land. Alberta always maintains the ownership of the land (Ibid:19). There are three ways in which the timber may be disposed: forest management agreements; timber permits; and quotas and licenses (Moen 1990). The difference between them, noted by Moen (1990) and Howlett (1995), is as follows: a quota gives the holder the right to harvest a certain volume of timber (volume-based) and an agreement gives the holder the right to harvest timber on a defined area of land (area-based). Both categories of holders must follow certain timber harvesting requirements summarized (following Moen 1990:20): conduct timber operations in accordance with an approved annual operating plan; comply with the terms and conditions of the timber disposition; cut timber progressively[21]; remove and manufacture timber after it is cut; avoid excessive waste when cutting timber and manufacturing timber products; cut all timber at the height of not more than 30 centimeters above average ground level; dispose of all limbs, tops and other debris in accordance with the requirements stated in the *Forest and Prairie Protection Regulations, Part II*; maintain campsites in a tidy and sanitary manner; and ensure that the disposal of the refuse debris or the location of any structure or excavation is in place and done in a manner that does not impede the natural flow of water in any water course or contaminate or pollute any river, stream, lake, well, or other body or source of water.

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[20] The following were reviewed for this dissertation. As this dissertation is concerned with the process of co-operative management and not with the intricacies of legal interpretation and discussion, the reader should refer to them directly. All of those noted include amendments and consolidations: *The Alberta Natural Resources Act* (1930); *Constitution* Act (1930); Environmental *Protection and Enhancement Act* (1992); *Fisheries (Alberta) Act* (1922); *Forests Act* (1980); *Forests Act Designated Fire Season Regulation* (1965); *Forests Act, 1971 Forest Land Use and Management Regulations* (1979); *Forests Act Timber Management Regulation* (1996); *Forests Act Timber Regulation* (1994); *Forest and Prairie Protection Act* (1995); *Forest and Prairie Protection Act Forest Protection Area Regulation* (1994); *Forest and Prairie Protection Act: The Forest and Prairie Protection Regulation* (1994); *Forest and Prairie protection Act: The Forest and Prairie Protection Regulations Part II* (1972); *Exploration Regulation* (1993) made pursuant to *Forests Act, Mines and Minerals Act, Public Highways Development Act, Public Lands Act*; *(The) Metis Betterment* Act (1973); *Metis Population Betterment Act* (1938); *Metis Settlements Accord Implementation Act* (1993); *Metis Settlements Act* (1990); *Metis Settlements Land Protection Act* (1990); *Mines and Minerals Act* (1994); *Natural Resources Conservation Board Act* (1994); *Public Lands Act* (1995); *The Public Lands Act Forest Grazing License Regulations* (1978); *Surface Rights* Act; *Wildlife Act* (1991); *Wildlife Act General Wildlife (Ministerial) Regulation* (1995); and *Wildlife Act General Wildlife Regulation* (1995). Federal Acts include: *An Act Respecting Fisheries* (1985); *An Act to Provide for Forest Management* (1947); *Constitution Act, 1867;* *Indian Act* (1985); *Indian Timber Regulations* (1978); and *The Crown Timber Act* (1952).

Area Based Management: Forest Management Agreements[22]

A Forest Management Agreement (FMA) is a contract approved by the provincial cabinet between a company and the government regarding the disposition of coniferous or deciduous timber, although each FMA can provide for only one. In exchange for exclusive access to the timber in a defined area and the guarantee of a secure land base, the companies agree to grow, harvest, and establish timber on a sustained yield basis. This is fundamental to an FMA and distinguishes it from other means of Crown timber disposal. An FMA is also used to encourage the development of large wood processing facilities such as pulp and paper mills, plywood mills, or sawmills. The Preamble generally sets out the goals of the FMA such as: sustained yield; economic utilization of forest stands; employment; maintenance of a high quality forest environment; and maximization of the value of the timber resource base[23]. The *Forests Act* gives an FMA holder the ownership of all Crown timber except as against the Crown[24] during the term of the agreement. The holder of the FMA also is entitled to compensation by anyone who causes loss or damage to the timber or to any improvements made on the forest management area by the holder. The FMA also achieves the goal of economic development of forest resources, while ensuring a perpetual supply of the resource (Moen 1990).

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[21] Under the wording of one of the former forestry acts, progressive cutting was referred to as "out of the face as it progresses" (personal communication, Cameron Henry, May 1996). Fortunately the language in the current act is somewhat less "embellished".

[22] The following Forest Management Agreements (FMAs) and amendments between forest companies and the Province of Alberta (Her Majesty the Queen in right of the Province of Alberta as represented by either the Minister of Energy and Natural Resources, Minister of Forestry, Lands and Wildlife, of the Minister of Environmental Protection) were reviewed. Each has both standard and unique components pertaining to timber supply and extraction; few, however, address issues of sustainable harvesting and/or integrated resource management until we reach the more recent FMAs: *Her Majesty the Queen and Canadian Forest Products Ltd.* (1971); *Her Majesty the Queen and Pelican Spruce Mills, Ltd* (1985); *Her Majesty the Queen and Weldwood of Canada Limited* (1986); *Her Majesty the Queen and Weldwood of Canada Limited* (1988); *Her Majesty the Queen and Procter & Gamble Inc. in favour of Weyerhauser Canada Ltd.* (1988); *Her Majesty the Queen and ANC Timber Ltd.* (1989); *Her Majesty the Queen and Daishowa Canada Co. Ltd. in favour of Daishowa-Marubeni International Ltd.* (1989); *Her Majesty the Queen and Slave Lake Pulp Corporation* (1990); *Her Majesty the Queen and Crestbrook Forest Industries Ltd, MC Forest Investment Inc., and Kanzaki Paper Canada Inc.* (1991); *Her Majesty the Queen and Sunpine Forest Products Ltd.* (1992); and *Her Majesty the Queen and Blue Ridge Lumber (1981) Ltd.* (1995).

FMA provisions provide an estate in land, giving certain rights of possession of the land as opposed to rights only in relation to the land (Moen 1990). A holder is only given that which is set out in the FMA or provided in the *Forest Act* and regulations. The Crown has given a certain bundle of rights, which can be determined by reviewing individual FMAs in detail. Those rights include the right to the living trees except as against the Crown and the right to go on the land to cut them down. Ownership of the growing trees, except as noted above, becomes important as it gives an FMA holder all the rights associated with the land (Howlett 1995, Moen 1990) such as: the basic right to establish, grow, and harvest timber on a perpetual sustained yield basis; the right to enter upon and occupy the area to grow, cut and remove timber; and to construct roads, camps, and other installations necessary for the company's operation. The Minister reserves all land rights on the forest management area not expressly given including maintaining and enhancing fish and wildlife resources, provided a company's right to manage the area for timber production is not significantly impaired. The Minister retains the right to authorize trapping on the forest management area. The Minister also may withdraw land from the area under specific circumstances that are set out in an FMA. Renewal for a further twenty years occurs at or before the expiry of the agreement. If a renewal agreement is not in place by the expiry date, a five-year extension may be granted during which a renewal agreement may be negotiated (Ross 1995).

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[23] Later FMAs also include broad wording reflecting a consideration of wildlife and water, over and above the more narrow criteria set out in the *Forests Act* of providing a perpetual sustained yield of timber. Moen (1990) notes that FMAs reflect a "no-net-loss" theory - it is like a bank account where you only take the interest. Sustained yield, however, has nothing to do with sustainable development of the entire forest or any of its parts, other than trees.

[24] Simply stated, "except as against the Crown" means except that timber the Crown may retain and/or expropriate. Detailed discussion of expropriation is beyond the scope of this dissertation.

Volume-Based Management: Whitefish Lake Deciduous Timber Permit

Timber quota holders and timber permit holders are specifically not given any interest in the forest land, but are given the right to go on the land to cut the timber. The ownership of the tree does not pass to the holder until the tree is cut. A holder of a timber quota, licence or permit does not have any right in the land on which the forest grows. The holder does, however, have a right to the timber within the terms of the permit.

For the purposes of this research, the deciduous timber permit (DTP) provided to Whitefish Lake is, essentially, a long term, volume-based quota management system[25], whereby the First Nation has the right to a certain volume of deciduous timber over a specified time, according to annual allowable cuts. The Alberta government determines the balance between growth and depletion of timber for each forest management unit in order to arrive at a figure representative of sustainable harvesting. In the case of Whitefish Lake, the Annual Allowable Cut

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[25] It is the view of Whitefish Lake that the DTP provided through the Memoranda and Agreement and Understanding represents a long term agreement whereby each renewal is equivalent to the five year quadrant of the twenty year quota system. For further detail of this system, see Moen (1990).

(AAC) to be harvested by the First Nation through the deciduous timber permit (DTP) provides for 350,000 cubic metres over a seven year period[26]. Whitefish Lake timber harvest planning includes the development of an annual operating plan for each year of operation detailing where the cut blocks will be located. Further, the development of these plans is guided by the *Alberta Timber Harvest Planning and Operating Ground Rules*, which apply to all forest operators[27]. These rules are pivotal to the entire planning process and, if there is any deviation, it must be noted in the annual operating plan. Whitefish Lake has also undertaken extensive work on the development of a forest management plan, consistent with the view that the Whitefish Lake deciduous timber permit is to be enacted more as a timber quota than a timber permit.

The Whitefish Lake Forest Management Plan

It is noted by Luckert (1995) that "the importance of any given tenure as an economic instrument depends on specific social values and natural characteristics of the forest resource in question" (Ibid:305). The forest development planning process in Whitefish Lake is noteworthy as a range of specific social values are being expressed through the planning process. The *Forest Management Plan Whitefish Lake First Nation* represents the compilation of data necessary to satisfy government planning requirements, while also satisfying certain technocratic and scientific[28] planning requirements of the First Nation in a very detailed manner.

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[26] This is provided with volumes of deciduous timber by way of non-competitive DTP's to be issued on a one-year renewable basis providing an average of 50,000 cubic metres annually.

[27] The *Alberta Timber Harvest Planning and Operating Ground Rules* 1994 cover the following: sustained yield timber management including general planning, utilization standards, harvest layouts, contingency planning, reforestation, and protection from insects and disease; timber harvest operations, including understory protection and protection of forests from wildfire during harvest operations; timber harvesting and the forest environment, including watershed protection during operations, watershed protection during infrastructure construction and maintenance, mitigating the impacts of campsites and miscellaneous facilities; timber harvesting and integrated resource management, including the integrating of timber harvesting with other resources, managing fish and wildlife habitat in timber harvest operations, managing ungulates and caribou, integration with trapping and other industrial developments; and submission requirements for the timber harvest plan, including the annual operating plan, the planning of roads, and reforestation.

Section 4.0 Timber Harvesting and Integrated Resource Management is included in Appendix E.

The components of the *Forest Management Plan* include the following: general introduction including goals and scope; a synopsis of the forest inventory; land use planning including the principles and practices of land-use (land classifications, administration allocations, decisions); sustained yield estimates; management objectives; commercial timber development opportunities including woodlands development, forest products development, and reforestation/rehabilitation; silviculture; forest protection; environment issues including harvest patterns, block size, logging techniques, the environmental impacts of forest harvesting; operating ground rules; regulation and control including permits, timber scaling, contracts[29], control and monitoring[30]; and strategic planning including silvicultural activities and development planning. A significant amount of the content of this plan expresses both scientific and traditional ecological knowledge bases. This is represented in the work the First Nation has undertaken with Tolko Industries Ltd. and is discussed as follows.

The Planning Framework: Scientific and Traditional Ecological Epistemologies

The Whitefish Lake forest management planning process is an attempt to combine two epistemologies - traditio[illegible] ecological and scientific - through the implementation of a technocratic document[31]. The forest management plan satisfies the legislative/regulatory/policy requirements of the Province of Alberta in the area of forest protection and management. Without a basis in traditional ecological knowledge, however, the plan will be difficult to implement. Currently little awareness exists in the general Whitefish Lake population about the contents of the management plan, or even of its existence. This is an issue that can be mitigated through the Implementation Plan for the Co-operative Management Agreement[32].

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[28] The reader is reminded that Tolko Industries Ltd. has been contracted by Whitefish Lake to undertake cutting contracts, as well as the provision of assistance to Whitefish Lake in the development of the annual operating plans and the Forest Management Plan.

[29] See Appendix F.

[30] An example of control is the requirement for contractors to submit post-harvest reports. A sample report is provided in Appendix G.

[31] See Appendix R.

The goals and objectives of the *Forest Management Plan Whitefish Lake First Nation* are noted as the following (Silvacom 1994b). Whitefish Lake First Nation, with the assistance of Silvacom Ltd. and Tolko Industries Ltd., developed guidelines for management of the forest on the Whitefish Lake Reserve. The plan "acknowledges that a full range of socioeconomic benefits and non-forestry priorities exist on each Reserve and must be accommodated through a comprehensive and consistent forest management program" (Ibid:1-1). Recommendations were developed following a detailed review of the forest inventory and a review of the existing infrastructure and market conditions in the vicinity. Five primary areas are noted: silviculture - rehabilitating and reforesting productive sites which are currently understocked; developing a workable system for harvest scheduling, under sustained yield management, which is consistent with current Whitefish Lake practice; specifying operating ground-rules which will accommodate forestry operations while minimizing negative environmental impacts; and presenting detailed forestry information (in graphical, tabular, and GIS-map formats) for use by the First Nation in forest protection, wildlife management and related environmental work. The management plan is designed to cover a twenty year period with a planning horizon (for sustained yield calculations) of one rotation (eighty years). The overall management plan is to be examined and updated on a regular 5-year basis (consistent with the Province of Alberta requirements for quota holders). Inventory data and the accompanying silvicultural plans will be reviewed and revised on an annual basis, through the annual operating plans. Annual reports regarding harvesting, scaling[33] and silvicultural operations are to be submitted to the Canadian Forest Service annually[34].

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[32] This Implementation Plan is laid out and discussed in Chapter 8.

Land-use planning is a primary feature of the management plan[35]. Whitefish Lake, Tolko, and Silvacom have identified four basic steps that must be completed through the planning process to ensure effective land use: create a comprehensive information base which can be used to evaluate the needs and issues of the First Nation; formulate short and long term objectives relating to the planned development of the area; identify all activities required to achieve the objectives; and execute activities and review the results[36]. This is linked directly with environmental issues. Through this planning process, scientific and traditional ecological epistemologies are reconciled. Both epistemologies, as noted in the forest management plan, recognize and support that:

> ecosystems are sets of interacting plants and animals, within their environment of soil, water and air, that can be viewed as

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[33] Timber scaling refers to the accurate volume measurement of harvested timber. It is performed on either tree length logs or on shorter logs, although the measurement is more accurate on shorter logs. Weigh scales may be used; however, a manual measurement of a sample of the total loads weighed must be made in order to calibrate the weight of the logs to the volume of these same logs. This weight to volume conversion number can then be applied to the weights of other loads harvested in the same general area in order to calculate their volumes. This is necessary to guarantee that the First Nation is receiving the timber dues to which it is entitled (Silvacom 1994b).

[34] Whitefish Lake First Nation is in the process of developing and adopting a formal permit system for all wood harvested on the Reserve. The permits identify clearly: date of the commencement and termination of the permit; the purchaser; the seller; the volume of wood that is covered by the permit, in cubic meters; the type of wood, including the species or species group, product grouping or size, and condition; where the wood will be harvested, such as the specific 1/4 section; the conditions of harvest including general ground rules for operation; timber dues, which is the charge levied by the First Nation for the timber; and signatures.

[35] Tolko Industries Ltd. has agreed to assist the First Nation in undertaking a comprehensive traditional land use study and the revision of the current forest management maps to reflect traditional land use, in addition to current land use. The company also has committed to assisting in the up-date of the current land use activities, recognizing that traditional ecological knowledge is a valuable component in forest management planning.

[36] This process is linked directly with the "Implementation Plan" discussed in Chapter 8.

> comprehensive functioning units. Forest ecosystems are complex biological communities, dominated by trees, but including much more. Planning for forest land use must reflect the complexity of the ecosystem; all components of the ecosystem must be considered and integrated into the planning process before the land is allocated (Silvacom 1994b:9-1).

Forest management involves decisions made to influence, control and manage the forest land base. Whitefish Lake, in consultation with Tolko Industries Ltd., takes the position that good forest management, properly planned and implemented[37] is compatible with the principles of sustainable development - development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Harvesting and reforestation, therefore, must be integrated as the choice of a harvesting system can have a significant effect on the environment and on reforestation success. If harvesting and regeneration are to take place in areas designated for prime uses other than timber production, the system chosen must be one which contributes to the achievement of the prime objective for that area. In areas of prime wildlife use, for example, the harvest system may still be clearcutting[38], but smaller blocks could be used with longer periods between passes[39]

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[37] This is defined as taking into account both traditional ecological and scientific knowledge bases.

[38] Clearcutting is a common harvesting and regeneration system used throughout North America, Japan and Europe (particularly in Scandinavia). It is generally viewed as the most appropriate system for even-aged pioneer tree species such as lodgepole pine and trembling aspen. Whitefish Lake and Tolko Industries have been working in the community, in part through this research project, to assist individuals in understanding harvesting methods and principles as the term "clearcutting" is associated with "naked mountain slopes in B.C. - so bad the moose slide off" (anonymous February 1996). In Alberta, the basic cutting system is the alternate clearcutting in blocks or patches, normally in two passes, where the second cut is approximately equal to the first in area, volume, operability, and quality. This does not, however, preclude the use of selective, shelterwood, experimental or other cutting systems (Silvacom 1994a, 1994b). The two-pass system of clearcutting can be an ecologically and environmentally sound practice for harvesting and regenerating commercial forest trees. In this system, adjacent cutblocks are harvested approximately 15-20 years apart. In some cases a three or more pass system (with longer periods of time between passes) could be used.

[39] A "pass" is equivalent to an annual cut, based on systematic methods followed in choosing the trees to be cut. This is based on the principle that properly managed forests yield much greater volumes of better quality wood over the long run than do lands on which unplanned logging is done (personal communication, Dave Knight, March 1996; Stoddard 1968).

(Silvacom 1994b). All stakeholders recognize, however, that harvesting and reforestation operations affect the forest ecosystem in several ways by: changing the microclimate of the cutover area; impacting the watershed and water quality; causing soil erosion and changes in soil productivity; affecting fish and wildlife habitat and populations; and affecting the aesthetics of an area[40] (Silvacom 1994b). These negative impacts must be balanced with economic viability of the region and of Whitefish Lake residents[41].

Whitefish Lake First Nation has the potential to realize substantial economic opportunities through commercial timber harvesting and forest management activities. In addition, the rehabilitation of unstocked or understocked productive forest lands also offers some economic development opportunities. Developing a pool of trained woodworkers and/or forest technicians for employment with off-reserve developments presents another option. These all are discussed in detail in the forest management plan.

The Reconciliation of Frameworks: Co-operative Forest Management

This chapter has outlined the three epistemological frameworks of Aboriginal (traditional ecological), government (technocratic), and industry (scientific) stakeholders through a discussion of legislation, regulation, and management planning. While many First Nations in Canada take the position that industrial development is not a politically nor morally acceptable approach to community economic development, Whitefish Lake First Nation takes the position that for the community to make a viable contribution to the socio-economic life of Northern Alberta and to provide a stable environment for future generations, residents require employment, business development, and long term stability. This is in addition to maintenance of traditional values and respect for the land and resources. Both of these will be accommodated and reconciled through Whitefish participation in the long term economic development and management of forest resources, and other resources such as fish and wildlife.

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[40] These issues are discussed in 9.5 Operating Ground Rules of the *Whitefish Lake Forest Management Plan* (Silvacom 1994b). An example of the ground rules pertaining to the protection of fish and wildlife habitat is contained in Appendix H.

[41] This is an issue that was raised frequently by the trappers in the Whitefish Lake area, as harvesting activities are having a substantial impact on their traplines. Communication between the trappers and Tolko Industries regarding consultation on harvesting activities needs to be improved, as the current system of sending registered letters is not appropriate. Many of the elder trappers cannot read English; consequently, there is no response to the letters. The lack of response is taken by the forest company as agreement with the cutting plan. See Appendix T.

This approach is based on a "bottom-up" versus a "top-down" view of development. As noted by Gilmour and Fisher (1991:135), to make this distinction is to recognize that both the starting point of development and the questions asked of development are different. This difference can be thought of as, historically, a move from focusing on the primacy of the forest and its development (the classical forestry approach) to the primacy of the people and their development (the people centered approach). It is noted by DuBois (1991) and Esteva-Fabregat (1996) that to the extent that strategies of domination are constructed from the bottom-up, real changes can be achieved only if these strategies are dismantled in that same direction by the people affected, not outsiders. Further, "these changes must target certain unequal relations of power and the process of development" (DuBois 1991:27). Whitefish Lake, through the co-operative management process with the Province of Alberta, is actively involved in reconciling developmental structures. While legislative prerogative remains with the Province of Alberta[42], Whitefish Lake has chosen to work within current structures in partnership with government and industry. The role of applied anthropology in this research setting is to understand the systems of transformation through the application of resource management regimes.

To facilitate this understanding, the following chapter provides an overview of the literature surrounding three primary areas applicable specifically to this research: social forestry; epistemology and resource management; and land tenure.

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[42] The National Aboriginal Forestry Association, of which Whitefish Lake First Nation is currently not a member, continues to undertake a substantial amount of work on the issue of treaty rights and renewable resource management. For further reference see: *Forest Lands and Resources for Aboriginal People: An Intervention Submitted to the Royal Commission on Aboriginal Peoples.* August, 1993.

3. Literature Review

> In the early days of my exposure to forestry, I had occasion to discuss forestry problems with very many foresters, foresters of every conceivable specialization. Had I believed implicitly everything they told me, I would have been driven inexorably to the conclusion that forestry is about trees. But, of course, this is quite wrong. Forestry is not about trees, it is about people. And it is about trees insofar as trees can serve the needs of people.
>
> Jack Westoby, *The Purpose of Forests*, 1989:ix.

> It has become quite clear that the heavy emphasis on setting up new local organizations to encourage people to look after forest resources is sometimes misdirected, simply because local organizations, concerned with forest management, already exist in many places...The view that rural people cannot manage forest resources by themselves usually depends on one or both of two assumptions. The first is that people are ignorant and need to be taught ("convinced of") the importance of trees...The other assumption is that common property resources will inevitably be overused.
>
> D.A. Gilmour and R.J. Fisher, *Villagers, Forests and Foresters*, 1991:39-40.

> I'm a forester and I feel, like some of the others in my profession, that we may not have gotten the best deal in our education. Society expects foresters to be stewards of the forest, protectors of the forest; but our education wasn't to be protectors of the forest, it was to be protectors of forest companies.
>
> Herb Hammond, *Boreal Forest Conference Proceedings*, 1991:60.

> Sustainability is the motherhood and apple pie of modern conservation...Anybody who opposes sustainability must be either evil or deranged. Sustainability and biodiversity compete for the title of "biggest buzzword in conservation".
>
> Reed Noss, "Sustainable forestry or sustainable forests?". *Defining Sustainable Forestry*, 1993:17-18.

Introduction

These quotes provide a framework for what is happening in social forestry not only in places like Nepal and Australia, but in northern Alberta, Canada. Prior to completing the literature review for my research and this dissertation, I came to the conclusion that issues facing rural people in Nepal and India regarding forest management are remarkably similar to those facing Aboriginal people in Canada. Epistemology, sustainability and biodiversity, land tenure, gender issues and their impacts on forest management were evident. What was also evident is that forest resources can no longer be managed with local communities in isolation.

This chapter provides a literature review of materials I have found to be very useful in my research and looks at: social forestry; epistemology and sustainability; and land tenure/ common property arrangements.

Social Forestry

In the past, Aboriginal people in Canada were the primary users of tree and forest products. With colonialization, the creation of the reserve system, and the institutionalization of government/industry relations, the relationships of Aboriginal people to forest use have been altered drastically[43]. We have made some progress from the previous disproportionate power relations demonstrated between non-Aboriginal governments and Aboriginal communities, as is apparent by this examination of the Cooperative Management Memorandum of Understanding between the Province of Alberta and the Whitefish Lake First Nation - providing for joint forest management on a particular area of what is considered by the Province to be provincial crown land, and what is considered by the Cree of Whitefish Lake to be part of their traditional territory[44]. This management structure is to be implemented cross-culturally[45] between: Cree and non-Cree; indigenous resource user and non-user; Provincial Crown and First Nation Government[46]; and corporate interests. In my view, this must be implemented within a context of joint community-government management. As such, the most appropriate framework within which to accomplish this is social forestry.

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[43] There is a substantial body of literature pertaining to the history of Aboriginal/non-Aboriginal relations in Canada. It is not the intent of this dissertation, however, to reiterate this history. For further reading see: Berkes (1980, 1984, 1987); Brightman (1993); Brody (1981); Clifton, ed (1989); Elberg et al (1975); Feit (1984, 1986, 1988, 1995); Gosse (1995); Green, ed (1986); Leacock (1995); Morrison (1977); Morrison and Wilson, eds (1995); Ray (1984); Ray and Freeman (1980); Reid (1985); Ridington (1995); Rogers (1961); Tanner (1979, 1983); Wacquan (1986); Wills (1984); and Wilson (1995).

[44] The concept of "Traditional Territory" is commonly known as the land that an Aboriginal group traditionally used and occupied. In Land Claims negotiations, this land-use area is marked out on planning maps. In completed Land Claims Agreements, such as the *Yukon Umbrella Final Agreement*, this territory becomes part of the Agreement process and is identified on the final maps. Depending on the Land Claim, a different bundle of land use rights accrues to this territory.

Gilmour and Fisher (1991) note that the concept of social forestry emerged partly as a response to failure of the industrial forest model to lead to socio-economic development, and partly to the increasing rate of deforestation and forest land degradation in the Third World. It was recognized that these two problems were interrelated and actually made worse by the lack of consideration given to the relationship between foresters and the rural poor. In the late 1970s, when international attention began to focus on the needs of the rural poor, it was recognized that forestry had two additional roles to play: "to provide forest products and trees for rural people who no longer had access to them, and to find ways of increasing the benefits of the forest resource to the local people who lived in or near forests" (Gilmour and Fisher 1991:6). Noted by Westoby (1989), in the late 1960s foresters and governments throughout the world began accepting the view, albeit perhaps slowly, that forestry is indeed only about trees insofar as trees can serve the needs of people. Westoby gave many addresses, replete with examples of conventional forestry extinguishing whatever rights people might have had to forest resources, or of subordinating these people to the welfare of the forest. Social forestry came to be used as a term denoting a reversal of these priorities. Messerschmidt (1990a, 1990b, 1991) points out that the textbook definition of a tree as a perennial plant was no longer adequate in describing the importance of trees.

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[45] The use of the term "cross-cultural" refers not only to indigenous/non-indigenous groups, but specifically to First Nation/corporate/government stakeholders.

[46] The issue of Aboriginal self government will not be considered in this dissertation. The Government of Canada has yet to recognize First Nations governments as legitimate governments. This is an issue that is in a constant state of flux and is complicated both legally and practically. A number of issues are involved such as sovereignty and self determination, further complicated by the Canadian constitutional structure. For a complete discussion of the legal interpretation see: Peter W. Hogg *Constitutional Law in Canada*, 1992.

Social forestry is operationalized most effectively as an umbrella term denoting a wide range of activities which link local people with forests, trees, and the products to be derived from them. Gill and Alavalapati (1992) and Messerschmidt (1994) note that social forestry is a continuum of forestry enterprises involving people. A subset of this is communal forestry, largely defined by notions of common property and resource management for the common good. The critical element is the people's involvement in decision-making and benefit as "...if local people take an active role in decisions about change, they will be more likely to adopt innovative solutions, be responsible for their care or management and accountable for the results. In their eyes and minds it will be their own and not some outsider's clever intervention" (Messerschmidt 1994:19). The extensive literature on participation[47] also recognizes the importance of local management and decision-making. Adamowicz et al (1994), Alavalapati and Gill (1991), Arnold (1991), Fisher (1992); Gill and Alavalapati (1992), Gilmour and Fisher (1991), Haley and Luckert (1992), Messerschmidt (1985, 1990a, 1990b, 1994) and Rai (1992), among others, point out issues whereby trees and tree products are most often embedded in complex resource and social systems. A shift had been made from a "forest centered" paradigm to a "people-centered" paradigm, noted by Gilmour et al (1992), Messerschmidt (1994) and Westoby (1989).

Gill and Alavalapati (1992) note that many Third World countries have realized that industrial forestry does not result in the meeting of basic needs of rural people. As a result, attention is being given to the creation of a forest economy whereby the efforts of industrial forestry development are matched by efforts to develop forestry programs directed to meet the needs of local people. This is critical, as the essence of the success of the social forestry concept is in the word "social":

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[47] For further discussion on the importance of participation, see: Annorbah-Sarpei (1993); Baldwin and Cervinskas, eds (1991); Biddle and Biddle (1965); Cary (1970); Cernea (1993); Chase (1996); Cornwall et al (1992); Davis Case (1989, 1990); Donnelly-Roark (1996); Grandstaff and Grandstaff (1987); Lane (1996); Messerschmidt (1991); Molnar (1989); Mosse (1994); Oakley and Marsden (1984); O'Brien and Flora (1992); O'Faircheallaigh (1995a, 1995b); Rocheleau (1994); Roddan (1994); Thrupp et al (1994); USAID (1990); Van Willigen (1993); Voss (1989); Warren (1988); Wax (1971); and Wolcott (1994, 1995).

> ...the projects serve local needs through the active involvement of the beneficiaries in the design and implementation of the reforestation efforts and the sharing of the forest produce...social forestry...involves direct participation of the beneficiaries, and implies different attitudes and skills on the part of foresters who have shed their role as protectors of forests against the people (Ibid:5).

Appropriate design of social forestry management systems must begin with an understanding of the constraints on traditional management, and the organizational requirements for establishing new management regimes. Case studies in Nepal, in Thailand, in India, and elsewhere demonstrate that when local institutions have broken down under the pressures of change, it is not to be expected that new village institutions - capable of controlling resource allocation and use - can be created easily (Arnold 1990). Guggenheim and Spears (1991) note that any potential institutions created must be consistent with those power structures in existence at the local level and recognized at the local level as being relevant[48]. Institutional structures must also be consistent with current government realities; otherwise, any reasonable innovation will be rejected out of hand as "...the resulting design (will be) based on an armchair assessment of needs...Local priorities may differ from those of the proposed forestry project. Villagers may see their greatest need as being water or roads, not forest products" (Ibid:329). Further, forest use priorities of communities will be based on value structures held[49] by individuals, including non-market valuations of trees.[50]

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[48] This is critical in order for the indigenous mobilization of power. For example, in the case of Aboriginal communities in Australia, O'Faircheallaigh (1995a, 1995b) notes that a maximization of Aboriginal bargaining power with mining companies does not occur automatically, but requires Aboriginal communities, organizations and institutions to develop appropriate processes and structures. The process is extremely important in its own right, "particularly for indigenous people who have often been excluded from decisions which affect them or who have been subject to processes they find alienating and degrading".

[49] Human values are a major consideration in all studies of culture. Held values, as those basic and enduring notions that a specific mode of conduct or end state is preferable to other options (Murray et al 1995), are central to consideration of resource management structures, governance, and decision-making. For further discussion see: Murray et al 1995. *Non-market Valuation Biases Due to Aboriginal Cultural Characteristics in Northern Saskatchewan: The Values Structures*

Westoby (1989) notes that no single sector of the community has a monopoly interest in the forest. This is consistent with my experience in resource management. Also consistent with my own experience is Westoby's note that forests must be managed for future generations, as well as for today. This must be done, however, in a framework that allows for economic development as well as social development:

> Once nature dominated man. Today man threatens nature. Man's ancient fears were starvation, disease and carnivores bigger than himself. His contemporary fears are unemployment, war, and pollution. Having made considerable progress in disposing of one set of enemies, he has succeeded in producing another set out of his own back pocket. Because some of the old enemies are not finally routed, anxiety about the new ones is as yet far from universal. It is hard to worry about space-ship earth if tomorrow's bread or rice is not assured (Ibid:193).

Epistemology and Sustainability

> Culture as knowledge is empirically grounded. We see it in action as we observe resource users; we access it by listening to what they say, and we learn from it to the degree that we allow ourselves to view and interpret folk knowledge objectively while holding our scientific biases and personal opinions about its legitimacy or utility in abeyance (Messerschmidt 1994:16).

"How" people know what they know is as important in cooperative management research as "what" people know. Culture is critical in epistemology as the values, norms and representations frame every action that is taken. When these actions concern the cooperative management of a resource between multi-culture stakeholders, knowledge issues form the basis of action. In this case, knowledge held

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Component. Staff Paper 95-05. Edmonton: Department of Rural Economy, The University of Alberta.

[50] Adamowicz et al (1994) note that conflict between cultures over natural resource allocations may be owing to the fact that particular cultures hold and assign different values of natural resources. There is also recognition given to the importance of positive interactions between different cultures requiring the development of a mutual understanding of the cultures involved. Such an effort requires an understanding of value differences between cultures. For further discussion, see: Adamowicz, W. et al *In Search of Forest Resource Values of Aboriginal Peoples: The Applicability of Non-Market Valuation Techniques*. Staff Paper 94-08. Edmonton: The Department of Rural Economy, The University of Alberta.

by members of Whitefish Lake First Nation, officials of Environmental Protection and Aboriginal Affairs of the Government of Alberta, and officials of Tolko Industries Ltd., all must be taken into account. The knowledge held by each party will be referred to as: traditional ecological knowledge, technocratic knowledge, and scientific knowledge, respectively[51].

Brokenshaw et al (1980), Howes (1980), Howes and Chambers (1980), and Warren (1994) define indigenous knowledge as the localized knowledge systems unique to a particular community, society or ethnic group. It is complementary to conventional science, which has not proved to be adequate in solving rural development or resource management problems. This term provides the framework for the inclusion of "traditional ecological knowledge" (TEK), which represents "traditional ecological knowledge...experience acquired over thousands of years of direct human contact with the environment" (Berkes 1993:1). As Berkes points out, there is no pure and concise definition for these terms. Traditional knowledge is seen as potentially politically incorrect as indigenous people may resent the word "traditional"; ecological knowledge is problematic as it implies scientific definitions of ecology. For purposes of this research, the following definition provided by Berkes is used:

> TEK is a cumulative body of knowledge and beliefs, handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment. Further, TEK is an attribute of societies with historical continuity in resource use practices; by and large, these are non-

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[51] There is extensive discussion in the literature regarding the use and definition of these terms. For example, indigenous knowledge was held to be that knowledge possessed by indigenous people. However, many indigenous people also hold what is termed "local" knowledge - that knowledge held by those who are familiar with land-use such as intensive agriculture. This group includes non-indigenous farmers. Another example can be seen in the case of a non-indigenous government official who was raised on a trapline in northern Alberta, continues to hunt and fish, and works in a government corporate environment. The "technocratic" knowledge held by this individual is informed by both traditional knowledge and local knowledge. A third example is found in the indigenous forester who has extensive knowledge of the forest from a technical point of view, but was raised in an urban setting and has little contact with the bush. Consequently, I have decided on the terms: traditional ecological, scientific, and technocratic, because they represent transcendant, group knowledges.

> industrial or less technologically advanced societies, many of them indigenous or tribal (Ibid:3).

Thrupp et al (1988) note that with the emergence of studies regarding the validity of traditional ecological knowledge from the Third World, and management regimes which take into account the use of this knowledge in resource management frameworks, TEK is now characterized as effective, efficient, and functional. I believe that the cooperative management of forest resources between Aboriginal people and government/industry is dependent upon an understanding of the knowledge base of each stakeholder by the others, and an awareness that knowledge bases of all stakeholders shift over time. These premises are supported extensively throughout the world with regard to knowledge in areas such as: forest management; fisheries (commercial and subsistence); polar bears; whales; minerals; plants; and ungulates.[52] Lewis (1991a, 1991b) and Messerschmidt (1991) note it is important to stress that indigenous systems of management are not remnants of old systems[53], but are dynamic responses to changing situations. Howes and Chambers (1980) point out that processually, the entire knowledge system is dynamic, and the idea of knowledge as process is useful in showing that traditional ecological knowledge cannot be understood independently of the ways in which it changes.

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[52] For further references on the critical nature of mutual understanding, see: Adams et al(1991, 1993); Anderson (1993); Bailey (1994); Bendickson (1991); Berkes (1980, 1984, 1989); Binder and Hanbidge (1993); Bradley and McNamara, eds. (1993); Brokenshaw, Warren and Werner, eds. (1980); Caulfield (1994); Chase (1996); Cizek (1992); Cohen (1989); Dickason (1991); Doubleday (1989, 1994); East (1986); Feit (1984, 1986, 1988); Freeman (1985, 1989, 1993); Freeman and Carbyn, eds. (1988); Gadgil and Berkes (1991); Gambell (1993); Gosse (1995); Gunn (1988); Hrenchuk (1993); Johnson (1994); Judd (1978); Kassi (1994); Kellert (1993); Lane (1996); Lewis (1993); MacKay (1993); Messerschmidt (1985); Neal (1996); Nhira and Fortmann (1984); O'Faircheallaigh (1995a; 1995b); Osharenko (1988a, 1988b, 1988c); Peepre and Jickling, eds. (1994); Pinkerton, ed. (1989); Poole (1989); Richard and Pike (1993); Richardson and Green (1989); Riewe and Gamble (1988); Sewell (1986); Swallow and Bromley (1992); Therrien (1988); Usher (1986, 1987, 1993); Wacquan (1986); Wheeler (1988); Wills (1984); and Winn (1992).

[53] It is often assumed that the word "traditional" implies technologically simple. For example, while Inuvialuit of the Western Arctic continue to hunt caribou and polar bear with dog teams, skidoos are used as frequently, if not more so, depending upon the community. In the community of Holman, Northwest Territories, dog teams are used more frequently as "dog teams don't run out of gas.". In the community of Tuktoyaktuk, Northwest Territories, skidoos are the preferred means of transportation. In neither case can it be said that "tradition" is no longer in existence. All that has changed is the means by which the Inuvialuit accomplish their traditional goal: obtaining food for their families and community. Similar observations have been reported by Hank Lewis (personal communication) in the Northern Territory of Australia regarding fire ecology: regardless of techniques used (or their ultimate technological origins), traditional goals are achieved.

Three knowledge bases are the focus of this research, and it is necessary to understand the functional relationship among them. Brokenshaw et al (1980) and Howes and Chambers (1980) make the point that generally, when traditional ecological knowledge and scientific knowledge come together, synthesis does not occur. Either the two are isolated from each other or traditional ecological knowledge is ignored or dismissed as inferior. Brokenshaw et al (1980), Cernea (1991) and Chambers (1992) have noted that the assumptions made in the past by industry and government throughout the world regarding the role of indigenous/local people in the development and management of resources have been based on principles related to the superior status of scientific knowledge, on colonial attitudes of knowing what is best for indigenous/local people, and on placing these people on the outer edges of economic and social development. This attitude has been linked by Chambers to dependency theory:

> The wealth and power of the cores attracts and sustains concentrations of professionals, resources and capacity to generate and spread knowledge. The knowledge of the cores is...described as modern, scientific, advanced...It is also powerful, being supported by and supporting the machinery of the state and of commerce. As a colonizing, unifying and standardizing force, it pushes out into the peripheries, propagated through communications, commercialization and education. In the receiving rural peripheries, there is an unconnected scatter of power among those who are powerless, of low status and poor. They have many localized sets of skills and funds of indigenous technical knowledge particular to their communities and conditions, but these are rarely recognized or valued by...the cores (1992:3).

I would extend this to the inclusion of technocratic knowledge as well - often, within this context, traditional ecological knowledge is dismissed. The scientific and technocratic knowledge bases are not superior or inferior: they simply are different mainly by method, basic philosophy, assumptions, and process.

Axon (1994), Brokenshaw et al (1980), Feit (1984), Howes and Chambers (1980), Singleton (1994), Gosse (1995); and Norem et al (1988) point out that understanding a traditional ecological knowledge system involves being cognizant of differences in who knows what and who controls what. It is also critical to examine: how knowledge is organized; for what purpose; how and to whom established knowledge is transmitted; how the different knowledge bases are synthesized; and whether synthesis or accommodation of the divergent knowledge bases is possible. In an examination of the potential for mutual understanding that is workable between the forest stakeholders, the differences in the traditional and scientific knowledge bases may reflect three divergent views of: the held value of trees themselves[54]; the value of what can be done with the trees; and actual use versus ideological use of the land and environment. Brokenshaw et al (1980), Gilmour and Fisher (1991), Hansen et al (1991), Johnson (1993), Noss (1993), Romm (1993), Salwasser et al (1993), and Sample et al (1993) note that the goals of management and conservation of a natural resource, within sustainable development principles, are the same for most stakeholders: maintenance of biodiversity and species differentiation, sustained yield for future generations, and sound economic development[55]. In Alberta, as is the case elsewhere, the management frameworks that each stakeholder brings to the process are vastly different. Issues of control and knowledge become critical:

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[54] Human values are a central consideration in all studies of culture. Held values are defined by Murray et al (1995) as those basic and enduring notions held by members of a culture. Specific modes of conduct or end states are preferable to other options based on these values. Further research is required to facilitate the participation of Aboriginal women in natural resource decision-making and management processes within Aboriginal communities, as held values differ significantly as a function of gender (Ibid).

[55] Sample et al (1993) note that an ecosystem approach must be not only ecologically sound but also economically viable and socially responsible. If a forest management approach is lacking in any one of these three areas, the system will collapse. The authors go on to note that this is a lesson that conservationists learned in the developing countries. Where nature preserves drawn on maps were often overrun by local communities whose needs for subsistence overwhelmed attempts to protect wildlife or native rain forests: "a focus on only biophysical factors, with little or no consideration of social and economic needs, is doomed from the start" (1993:7).

> ...the question remains as to how scientific knowledge and TEK can be integrated - and whether such integration is desirable in the first place. Rooted in different world views and unequal in political power base, these two systems of knowledge are certainly not easy to combine. Serious attempts at integration inevitably come up against the question of power-sharing in decision-making (Berkes 1993:6).

Rai notes that synthesis may be facilitated through the involvement of an anthropologist:

> A holistic understanding of the natural environment of a human group calls for a synthesis of both notions of the scientific and native environments. An anthropologist, as an outside investigator who seeks to understand a society within the native perceptual framework, can help synthesize these two perspectives (1992:265).

Foresters have assumed for many years that they are the custodians of the forest and scientific knowledge has priority in the performance of that custodial function[56]. Consequently, the economic and social development of Aboriginal people have been hindered by an excessive dependence by industry and government on centralized, non-participatory planning, noted by Scoones and Thompson (1994). Cernea (1991), Messerschmidt (1994), Rai (1992) and Uphoff (1991) observe that indigenous people have been viewed as the problem, and the foresters and planners viewed as the solution. This attitude reflects a jaundiced view of "exactly who is supposed to benefit from [a] project, but it also effectively excludes the contributions the people with limited resources can and should make" (Cernea 1991:466). This is a dangerous course to follow in natural resource management, as:

> The unschooled native, in spite of the fact that he (sic) has had no grounding in western science, is an astute and competent observer of

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[56] This is noted by Arnold (1990), Chambers (1992), Fisher (1992), Gilmour and Fisher (1991), Guggenheim and Spears (1991), Hammond (1991, 1992), Messerschmidt (1990a, 1990b, 1994), Noss (1993), Poffenberger (1990), Rai (1992), Romm (1993), Runge (1985), Salwasser (1991), Salwasser et al (1993), Sample et al (1993), Shepherd (1985), and Westoby (1989).

> the various environmental phenomena. He holds intimate knowledge not only of the various components of his environment but also of the inherent systemic interrelationships of these components...he is well aware of the innumerable constraints the environment imposes. The awareness, some of which is unconscious, of the limits of the environment allows him to live, operate, survive, and adapt in his environment (Rai 1992:260).

A further complication of the "forester as custodian" view is that many professionals deliberately refuse to alter their perspective, as to do so requires a new way of thinking. This is noted by Chambers (1992) as a "flip" in thinking: "They have to accept those whom they have been conditioned to regard as ignorant and inferior as their teachers...Instead of standing and lecturing, they have to sit down, listen and learn...More, they have to accept the priorities of the last" (Ibid:16). This is, unfortunately, where the "flip" may break down. While noted by Chambers as a prerequisite to more appropriate development, in reality the acceptance of the priorities of the "last" may not occur, or even be possible, as the indigenous community itself often has difficulty in determining its own priorities. This does not, however, negate the importance of the full participation of the indigenous community in processes of resource management. Warren notes the importance of participation in agricultural development, as well as resource management:

> The success of a development project often depends on local participation. Familiarity with indigenous knowledge can help change agents understand and communicate with local people, enhancing the possibilities for participatory and sustainable approaches to development...[in an examination of] the role of indigenous knowledge in facilitating the process of development, it is important to stress that the enhanced process will result in improved products of development...(1991:2).

It must be acknowledged, however, that it is often not a simple process to obtain "indigenous knowledge" to facilitate the understanding of the change agent. Baines

(1980), Lewis (1989)[57] and Rai (1992) note this as problematic in some cases, as neither scientists nor anthropologists are free of cultural bias. This means that questions may be overlooked which are critical to the process of development, as:

> An outside investigator and a native differ considerably in their knowledge, evaluation, and analysis of a particular natural environment. They assign different orders of importance to the various components and sub-components of the ecosystem and cognize its interrelationships differently. They thus refer to two distinctly different realities, namely, the *scientific environment* and the *native environment* (Rai 1992:265).

Berkes notes that the aim of integrating traditional knowledge with scientific knowledge (and in the case of my research, with technocratic knowledge) is not to control nature or forests, but to provide a contribution to new biological and ecological insights, as "...much traditional ecological knowledge is relevant for contemporary natural resource management..."(1993:5). This process of integration is not without its hazards, however. Chase (1996), Donnelly-Roark (1996), Lane (1996), Mosse (1994), O'Brien and Flora (1992), and Voss (1989) have demonstrated that the rhetoric of empowerment often used in discussions surrounding this issue does not necessarily coincide with reality. The use of knowledge may be exploitive and manipulative:

> ...while there is a great scientific and cultural need to document and value Indigenous Knowledge, there is also the danger that Indigenous Knowledge can simply become one more tool in the control of local communities (O'Brien and Flora 1992:96).

Land Tenure and Common Property

One of the most critical elements in renewable resource management is the way in which land is used, held, transferred, and viewed[58]. Differences between formal/informal and codified/non-codified legal systems concerning land tenure are a recurring stumbling block in the design of workable cooperative management regimes. It has been found throughout the Third World that one of the most common objections to co-management regimes is that they prejudice non-landowning groups that are nevertheless dependent on the land (Guggenheim and Speers 1991). This same objection can be found in government/industry/Aboriginal relationships in Canada.

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[57] Lewis describes the process of the boreal forest Indian trapper setting fire to vegetation so as to maintain habit diversity, essential for the wildlife which sustain the life and livelihood of the trapper. He makes the point that while anthropologists had observed the practice, they were naive about the ecological role of fire and the significance that fires could have for hunting-gathering technologies as " (n)either the scientist nor the anthropologist had been sufficiently free of cultural bias, sufficiently "objective", even to be able to decide that questions were worth asking, let alone where and when to look for answers" (Lewis in Baines 1989:67).

Aboriginal involvement in Alberta forest management[59] has the potential to develop in a meaningful way. This involvement is, however, bound by institutional frameworks within which social forestry is practiced. One of these frameworks is the system of property rights under which Alberta forests are held. As noted by Haley and Luckert:

> Property rights influence the quantities and kinds of resources committed to forest management, the magnitude and the mix of goods and services forests produce and the distribution of the wealth which forest resources generate...In many Third World countries, the breakdown of customary ownership of forest land by communities or tribal groups is a major contributor to forest destruction and rural poverty (1992:91).

In the interest of serving public goals such as the creation of public wealth from the harvesting and processing of timber, government forest policies are called upon to create employment, maintain a constant or increasing supply of timber to sustain economic activities, produce non-timber forest products, and recognize the general quality of the forest environment (Haley and Luckert 1990a:14). It is becoming clear that, in Alberta at least, the difficulty is in the distinction between who should manage Crown forests, depending on society's notions of what is morally correct or equitable, and who will manage Crown forests, depending on the existence of legal rights and on the legal requirements imposed by forest tenure agreements (Luckert and Haley 1989:180). There is obviously a critical distinction that must be made between *de facto* and *de jure* ownership and use rights[60]. The Aboriginal people of Whitefish Lake First Nation have signed a Treaty Land Entitlement (land claim) with the Crown whereby provisions for the ownership and use of reserve land are clearly laid out. Thus, principles of legal ownership come into play. What is critical, however, is the fact that Whitefish Lake First Nation residents traditionally used and occupied additional territory which is considered provincial Crown land and was not included under the Treaty Land Entitlement. This does not, however, alter the perceptions of Aboriginal people that they have a valid right to use the land and resources on that land. This includes the management and use of forests, as members traditionally used and managed these forested areas. The traditional territory of Whitefish Lake has ceased to be common good and, as noted by Shepherd (1985), tree tenure without land tenure is an impossibility. To the Aboriginal people, however, communal property resources remain important as resources that have meaning within Aboriginal traditional management. The Traditional Territory (also known as Provincial Crown land), as a communal property resource of the Aboriginal people of Whitefish Lake, must be managed in partnership with government and industry; otherwise, no equitable balance can be maintained between the various resource users and managers.

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[58] In Canada, this is the most crucial issue of all land claims and co-operative management discussions.

[59] In Alberta, the pattern has been toward licensing arrangements referred to as forest tenures which provide companies with rights to harvest public timber for varying time periods. In return, the tenure holders are required to assume various management responsibilities for public forests. This is noted by Haley and Luckert (1990a, 1990b, 1992); Luckert and Haley (1989); Ross (1995); and Ross and Saunders (1993).

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[60] *De Facto* ownership and use rights to land may be described in terms of the fact that the First Nations people do, in fact, use the land but do not legally own the land. This phrase is used to characterize both a past action (Aboriginal land use and occupancy prior to colonization) and a current state of affairs (historical developments, treaties, and crown ownership in the public good). *De jure* ownership is defined within the context of the current Canadian constitutional structure. This describes a condition in which there has been total compliance with all requirements of the law. In the case of land tenure, Crown ownership in right of the public good is described as rightful, legitimate, just, and constitutional. The terms legitimate, lawful, by right, and just title provide the interpretive framework for understanding the vast difference between *de facto* and *de jure* ownership of land.

The realities and perceptions of tenure must, therefore, be dealt with thoroughly and precisely not only in Alberta[61], but throughout the world, as divergent views come into play between indigenous users, government, industry, and other third parties as noted by Berkes (1989), Bromley (1985a, 1985b), Hrenchuk (1993), Lane (1996), Messerschmidt (1985, 1994), Ostrom (1985, 1994), Poffenberger (1990), Poole (1989), and Thomson et al (1985). These divergent views are based, in part, on more expansive notions of common property resources. What is crucial, however, is the acknowledgement of the need for co-operative management of these resources between indigenous users and governments, based on common principles of sustainability. Bromley (1985a) notes that there has been a laudable shift in focus away from natural resources as commodities, and toward management regimes, systems, and mechanisms. Common property, in this context, is defined by Bromley as a people management regime, as:

> The presumption of a private property regime is that people management is not an interest of the collective...the premise is that the sum of actions taken by a large number of atomistic entrepreneurs will contribute to the larger public good. With common property regimes, the presumption is that the interests of the group transcend the individual interests - at least with respect to the use of certain resources during particular times of the year (1985b:594).

In my research, it is important to note that all stakeholders consider a management goal to be a level of sustainability of forest resources that gives future generations the option to continue such management. It is a goal that does not advocate sustained yield for its own sake, but rather as an explicit human choice that passes on to the future what we have inherited from our past. Bromley (1985b) and Thomson et al (1985) point out that institutional arrangements for the management of these resources are created and evolve as responses to certain combinations of circumstances. When divergent views arise or are articulated between Aboriginal resource users and government in Alberta about the use and status of an area, respectively known as Traditional Territory/Crown land, new institutional arrangements - such as co-operative management - can be established. Furthermore, whether developed and implemented in Alberta or elsewhere in the world, these new arrangements will ultimately determine the fate of the resource base.[62]

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[61] The concept of common property is rooted to Crown lands: they are thought to belong to the public (Hrenchuk 1993:70). Crown lands are viewed by the general public as available for their use and enjoyment - access is open. In keeping with this premise, these lands also are available for developments deemed to be in the public interest. Common property resources themselves appear to be classed according to the relevant property-rights regime in operation. In Alberta the resources are viewed as the property of the provincial government: ownership and management control is held by the province and access is regulated.

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[62] For further discussion regarding this issue, see: Bromley (1985a, 1985b); Bromley and Cernea (1989); Cernea (1991); Chambers (1992); Fisher (1992); Gilmour and Fisher (1991); Gilmour et al (1992); Guggenheim and Spears (1991); Hammond (1991 1992); Hansen et al (1991); Hrenchuk (1993); Johnson (1993); Messerschmidt (1985, 1990b); Neal (1996); Noss (1993); O'Brien and Flora (1992), Ostrom (1985); Poffenberger 91990); Rai (1992); Romm (1993); Runge (1985); Salwasser et al (1993); Scoones and Thompson (1994); Sen (1984); and Westoby (1989).

4. Overview of Selected Theoretical Approaches

> Michele, exactly what has this got to do with how things really work out there? So what has this got to do with reality?
>
> Anonymous

> Theory can serve both analytically and interpretively. It is probably employed more often analytically, for the purpose of providing structure. For interpretation, theory provides a way to link our case studies, invariably of modest scope, with larger issues. I suspect it is this linking power, rather than explanatory power, that makes theory so popular with individual researchers.
>
> Harry Wolcott, *Transforming Qualitative* Data, 1994:43

> Theory is often employed as a sort of intellectual bludgeon, a killer term used to menace problem-focused neophytes and belittle efforts at applied or "practical" research. The "theory question" poses a dual challenge - on the one hand to come up with an original problem and a theoretically adequate approach to it, on the other hand to be able to demonstrate how a unique case is embedded in some larger concern related to a significant body of theory. For those not initially attracted to or comfortable with theory in the first place, nagging issues of what-to-do-about-theory never get answered to everyone's satisfaction and never go away.
>
> Harry Wolcott, *The Art of Fieldwork*, 1995:183

> Little by little the horrid truth began to dawn...The underdeveloped countries are not underdeveloped because they started late in the development race. They are not underdeveloped because they lack adequate resources. They are not underdeveloped because they lack know-how...They are underdeveloped as a consequence of the development of the rich nations. The development of the latter is founded on the underdevelopment of the former, and is sustained by it.
>
> Jack Westoby, *The Purpose of Forests*, 1989:244

Introduction

Wolcott (1995) terms the pursuit of theory in fieldwork as "the Great Interface" between analysis and interpretation. In the case of my research, I extend the notion of the "Great Interface" to what I see as a strong and necessary link between theory and practice. I also extend this idea to my own search for relevant theoretical approaches. It is not possible to apply conveniently one single theoretical perspective to my research. It also is not useful to review all of those theories that could have some degree of relevance in this dissertation, for with creative thinking it is possible to link any practice to just about any theory[63].

Theory is a process, not a perfect product - rather like development projects themselves. I am of the view that, while both social theory and social practice are imperfect, good practice is based on theory to the extent that it provides something of a structure for practice[64]. Otherwise, practice without theory becomes a "series of ad hoc steps" (Glaser and Strauss 1967; personal communication, Dhara Gill, 1996).

I consider the approaches of modernization, dependency, and the culture of poverty useful as they are based on perspectives that take into account relationships of power, authority, and dependence within development contexts - including the context of resource co-management. While on the surface many would question how these approaches could possibly be relevant to co-management in the comparatively wealthy Province of Alberta, in truth there are many peoples in Canada for whom issues of basic quality of life and cultural survival are paramount and intermingled. In many cases, socio-economic realities and resource management structures faced by aboriginal people are similar in nature to those faced by residents of developing countries. In the case of cooperative management, we are promoting a developmental activity. Components of this activity, such as "participation", are easier to deal with if they are framed within the context of a theoretical approach. In the case of applied anthropology, however, the application of theory may be tenuous and referred to as

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[63] When I first returned to the university in 1993, I decided to focus on the hermeneutical perspective of Jurgen Habermas. During this period, I was able to see every action and every reaction in past field experience from a hermeneutical perspective. A short time later, the post-modernists were added. I decided eventually that these were not the most appropriate approaches for my research and I began more extensive work on development theory.

[64] After many years in the field, I have reached the conclusion that I do not agree with the perspective taken by the post-modernist Borgman (1992) that practice is self-sustaining: "...while practice can survive without theory...theory arises from a practice and perishes without the nourishment of a practice" (Borgman 1992:291).

"the art of conceptual self-defense" (Wolcott 1995).

In this chapter I have chosen those theoretical approaches that I have found most relevant to my research - modernization, dependency, and the culture of poverty - in spite of shortcomings. I have also included the historical basis for the development of the modernization and dependency approaches, as I am of the view that an understanding of historical context is critical in understanding the approach. Within this context, this chapter discusses: a) the concept of development; b) the theoretical approaches of modernization and dependency; c) the culture of poverty; d) issues of gender in modernization and development theory; and e) the relevance of the above to the case study.

The Definition of Development

A wide body of literature defines "development" in many ways. There exist well over 300 different usages of the term (Cochrane 1971; Goulet 1971; Pitt et al 1976) ranging from Andre Gunder Frank's definition of development in economic terms to the broader definition provided by Denis Goulet. Goulet, a priest who became part of the neo-Marxist Liberation Theology movement[65], approached the issue of development from a philosophical base aimed at getting priests out of the churches and into the community. Goulet's approach was based on a philosophy of participation and self-determination as the cornerstone to a better way of life. His objective was to shift the debates over economic and social development into the arena of ethical values, rather than provide a critical examination of world capitalism. I chose his interpretation of "development" as a roadmap for my own research:

> Development is not a cluster of benefits "given" to people in need, but rather a process by which a populace acquires greater mastery over its own destiny. Even in purely economic terms, a vital difference

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[65] Paulo Freire, author of *Pedagogy of the Oppressed (1993)*, was also part of the Liberation Theology movement. He devoted his life to the advancement of the impoverished people of Brazil and developed a theory for the education of illiterate people, based on the conviction that every human being is capable of looking critically at the world. With the proper tools, the individual can gradually perceive social reality and deal critically with it.

> separates economic progress from a progressive economy...An economy becomes progressive when men who had hitherto been passive now conjugate their efforts to eliminate ignorance, disease, hunger, mendacity, servility, and exploitation...Progress becomes the fruit of men's (sic) own will and work. The "beneficiaries" of development are also its agents (Goulet 1971:155-156).

Development anthropology is even more difficult to define precisely as there exists no coherent body of theory, concepts, or methods unique to this sub-field whereby it is viewed as "an incipient profession and field of study" (Hoben 1982:349). Anthropology has been characterized both as providing solutions to theoretical problems and to practical problems. Seldom have these two aspects been viewed as a single entity, as it is common to consider the primary "object" to be the people studied. Van Willigen (1993) notes that in applied work, however, the "object" is an overall system and the theoretical realm is based on "application"- particularly when dealing with issues of development, local/global articulations, and co-management of resources. Similar to the approach taken by Ferguson (1994) in his study of development and bureaucratic power in Lesotho, whereby the primary objective was to study the operation of the international development apparatus in a particular setting, what is primary in my research is the "system" that is to be both "developed" and will also undertake the developing. My research is principally about the process of implementing co-management within a particular system of stakeholders, structures, and interests. A complex relationship exists between the intentions of planning and the strategic "intelligibility" of outcomes: intentional plans such as co-management agreements are important, but usually not in the way planners imagined. This fact has been demonstrated repeatedly in applied anthropology as:

> ...intentional plans (interact) with unacknowledged structures and chance events to produce unintended outcomes...intelligible not only as the unforeseen effects of an intended intervention, but also as the unlikely instruments of an unplotted strategy (Ferguson 1994:20).

The First Development Decade: Modernization

Modernization theory drew heavily on the work of Durkheim, Parsons and Weber and stemmed from the response of American political elites and intellectuals to the international setting of the post World War II era. The first formulations of what has come to be understood, in general, as "development" came from economists who had been influenced by the post World War I practice of state intervention in the economy. A conscious commitment to intervention was exemplified by the post World War II Marshall Plan[66] and the subsequent 1948 Universal Declaration of Human Rights which committed nations to seek material betterment and observance of rights and freedoms for individual groups. Hoben (1982), Goulet (1971), Leys (1994) and Preston (1982) note, however, that in terms of relationships with the Third World, this "commitment", particularly by the United States, was based on: ensuring the maintenance of the Cold War world view as a policy response to the spread of communism; and facilitating American international financing and trading regimes. National economic planning in the countries of the Third World was seen as a natural extension of this management process. Macroeconomic policy instruments became the means of development and the state the agent of development, based on the premise that Third World economic problems would yield to the actions of benevolent states with sufficient supplies of capital. Capital would raise rural productivity and transfer labour out of agriculture and into newly established industries[67]. This is consistent with the views expressed by Cavanagh et al (1994), Fukuyama (1992), Preston (1982), and Tipps (1973) that modernization was shaped primarily by both American pressures and the Bretton Woods[68] inception of the World Bank and International Monetary Fund.

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[66] The Marshall Plan was developed by the industrialized nations following the end of World War II as a means of avoiding the impoverishment of the defeated nations. This impoverishment had occurred following World War I, and it was not to be repeated. The Marshall Plan was based on the view that as advanced industrialized nations of the world all started from humble agrarian beginnings, the less developed economies only had to work through the linear stages of capitalist development. Underdevelopment was a function of capital shortages, and the Marshall Plan would provide the massive transfer of funds to developing countries - disseminated by the World Bank - needed to ensure the rise to capitalism. Uchendu, ed. notes that this capital injection "has not activated the sleeping multiplier which in turn would generate a desired level of economic growth and development in the Third World economies" (1980:45).

Industrial development was to follow a coherent pattern of growth, producing uniform social and political structures across different countries and different cultures. While disagreement existed among theorists regarding exactly how unilinear this historical evolution would be, and whether there existed alternative paths, they all were in agreement that history was "directional" and the liberal democracy of the advanced industrial nations lay at its end. Modernization would secure allies for the United States within the Third World and would also offer the Third World protection against socialism.

By the 1950's, economists had become "Dangerous People"[69] as economics became the magic science and economists, "newly endowed with this unexpected power to exercise their influence over enterprise, interest groups and governments, swiftly and proudly took for granted their new role..." (Max-Neef 1992:19-20). New nations and Third World countries became prime stakes in Cold War economics.

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[67] During this period, the United States International Cooperation Administration began its recruitment of anthropologists to "facilitate the diffusion of improved technology by overcoming resistance to change grounded in traditional values, institutions, and practices" (Hoben 1982:354).

[68] This conference was held by the Western industrial nations in the town of Bretton Woods, New Hampshire in 1944, and marked the creation of two of the most powerful vehicles for the ideology and development policies of these nations - the World Bank and the International Monetary Fund. Designed to provide huge capital infusions to Third World countries in the form of development aid and loans, it is commonly-held that the "true beneficiaries have been the several hundred large corporations and banks and the several thousand elites of the Third World" (Cavanagh et al 1994:xii). It is my view that on a macro level this is indeed the case; at the level of individuals working for the Bank, for example, this view is not correct. This is discussed in Chapter 7.

[69] Manfred Max-Neef is a Chilean economist who pioneered criticisms of orthodox development economics. His approach has come to be known as "barefoot economics" - economics as if people really mattered. Max-Neef's use of the term "dangerous people" flows from Lord Keynes warning that the importance of economic problems should not be overestimated, with the result that matters of higher and more permanent significance are sacrificed to its supposed necessities (Max-Neef 1992).

Knippers Black (1991) and Leys (1994) note this attitude reflected in forms of development aid: Third World countries had two options - "dog eat dog or all eat dog". Further, academics did little to criticize American State policy as McCarthyism silenced an entire generation of intellectuals and snuffed out all meaningful opposition to the official version of the Cold War. By 1955, however, the original optimism had faded as states such as India and Latin America appeared to lack the capacity to live up to the social-democratic ideal of a "rational, firmly benevolent enforcer of the national interest" (Leys 1994:11). As Hoben (1982), Leys (1994) and Preston (1982) note, the desire to compete "for the minds of men" and to serve the welfare of people led to often ineffective and inefficient development programming. By the Kennedy years, modernization became implausible owing to the rhetoric and practice of cold war politics, the United States policy of containment, and the results of that policy (Preston 1982). Modernization theory, at least intellectually, eventually fell victim to charges of ethnocentrism as it elevated the Western European and American development perspective to the "level of universal truth" (Fukuyama 1992). Leys (1994), Fukuyama (1992) and Preston (1982) point out that modernization never took into consideration whether all nations really wanted to adopt liberal democratic principles, and whether there were not other equally valid cultural starting and end points[70]. Modernization theory worked only to the extent that people are (simply) economic creatures, driven by the imperatives of industrial growth. The argument in favour of socialism as the "development strategy of choice" (Fukuyama 1992) for Third World countries was considerably strengthened by the apparent failure of capitalism to promote sustained economic growth in Third World regions[71]. With mounting opposition to the capitalist concept of development and a general reaction against any "official" or government action, modernization came to be viewed as naive.

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[70] An example of this is provided in Henry Wells' (1969) study of Spanish national character. He develops a profile of the foundations of Hispanic world view based on four value premises: 1) life is shaped beyond human control; 2) society is naturally hierarchical; 3) while a person has intrinsic worth, this has nothing to do with rights or equality of opportunity; and 4) the existence of male superiority from which flows authoritarianism and paternalism. This results in an addiction to strong leaders and acceptance of authoritarian rule. The conclusion reached by Wells is that "Hispanic peoples have never found democracy particularly attractive precisely because they attach little value to widely shared power" (Wells in Harrison 1985:142).

The Second Development Decade: Dependency, Development and Underdevelopment

The period known as the second development decade began in the early 1960's as programs in rural development continued to be neglected owing to Western emphases on infrastructural development and technological innovation[72]. By the mid-late 1960's, dependency theory[73] was strongly promoted by academics based on self-assertion by impoverished Third World nations (primarily Latin America) which saw themselves in contrast to the wealthy, industrialized "north"[74]. Dependency theory asserts that the position of a country in an international system of unequal exchange and unequal political power conditions its development strategies and achievements. In contrast to modernization whereby the solution to the Third World development "problem" lay in a linear staging of economic progression, the dependency solution was seen to lay in the reduction of links between the metropoles/centre and satellite/periphery. The Third World Nations are said to be in a constant state of economic decline relative to the centre (Western Nations) owing to the global capitalist economic order. As the wealth of developed nations is linked directly with the poverty of the Third World, through the latter's export of raw materials with low processing content to the former, Third World nations are kept in a state of perpetual dependent development. The world market for manufactured goods, based on the extraction of raw materials by multinational corporations, is therefore locked up by the wealthy nations. On another level, certain sectors within nations share these same relationships through rural/urban dichotomies as well as internal pricing policies (personal communication, Eloise Murray, 1996).

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[71] This was impacted also by the mounting public opposition in the United States to the Vietnam War.

[72] Counter-insurgency efforts did provide the one area where rural development programs were supported . The American Central Intelligence Agency consistently debriefed academics working in the Third World, in addition to sponsoring ethically-questionable activities such as Project Camelot and the Thailand Project, discussed in Chapter 5.

[73] For a full discussion of the premises of dependency theory and modernization theory see: Abramovitz (1993); Chilcote (1984); dos Santos (1993); Frank (1969a, 1969b); Fukuyama (1992); Galbraith (1964); Gordon (1972); Harrison (1985); Inkeles and Smith (1993); Kay (1975); Kitching (1982); Meadows et al (1972); Moon and Dixon (1993); O'Hearn (1993); Preston (1982); Rodney (1973); Schumaker (1973); Scott (1995); Seligson (1993); Seligson and Passe-Smith, eds (1993); Uchendu (1980); Valenzuela and Valenzuela (1993); and Wallerstein (1974).

[74] "The rich would get richer, and the poor would get poorer", as capitalism continued to crush and dominate Third World economies.

The dependency theorists, many of whom were Marxists, called for an end to dependency through Third World disengagement from the world capitalist system. Other theorists sought to bypass multinational corporations and encourage local industry through import substitution: the poor, through participation in the process of setting of goals, would now be active in shaping their lives. Fukuyama (1992), Harrison (1985) and Preston (1982) note that still others, more radical in perspective, sought to undermine the global economic order by promoting revolution and integration into the Soviet bloc. This was not, however, a support for socialism but was a strong argument for the independence of Third World countries noted by Kitching:

> ...most dependency theorists are determined industrializers and desire an 'independent' economic position for the underdeveloped countries so that they can industrialize. Among the leading theorists of dependency...one does not find any romantic idealization of the peasantry or any belief that development can come predominantly or totally through agriculture and rural development" (1982:176).

By the late 1970's, dependency theorists and Marxists continued to accuse the Western nations of exploiting the Third World. While noted by Kay (1975) and Kitching (1982) as not an incorrect assumption, it did nothing to assist the Third World as dependency theorists did not have a clear idea of what this meant in practical terms, and practical solutions could not therefore be offered. Conclusions reached by dependency theorists did not get beyond the level of a general critique of ideology: "...the best they could achieve was a historical account of the process of underdevelopment elaborated through empirical categories, such as dependence, metropole and satellite, which lapse into hopeless contradiction in the face of close investigation" (Kay 1975:104).

Another example of the weakness of dependency theory - as an explanatory framework used in isolation - is noted by Fukuyama regarding the economic development of East Asian countries such as Taiwan, Singapore, South Korea and Thailand. If Third World underdevelopment was owing to the participation of less developed countries in the global capitalist order, how was it that these countries - which had deliberately pursued export led growth, tying themselves to foreign markets and capital through links with multinationals - had been so successful? These countries tended to permit the greatest degree of competition in domestic markets and integration into international ones:

> What Asia's postwar economic miracle demonstrates is that capitalism is a path toward economic development that is potentially available to all countries. No underdeveloped country in the Third World is disadvantaged simply because it began the growth process later than Europe, nor are the established industrial powers capable of blocking the development of a latecomer, provided that country plays by the rules of economic liberalism (1992:103).

Fukuyama (1992) and Harrison (1985) offer a third criticism of dependency based on the failure of capitalism in Latin America. The first explanation is based on the content of culture: that the habits, religions, and social structure of the peoples of regions like Latin America somehow obstruct the achievement of high levels of economic growth (Fukuyama 1992; Harrison 1985). The second explanation is a matter of policy: capitalism has never worked because it has never been seriously tried.

Owing in part to public sentiment surrounding the Vietnam War, by the close of the 1970s, a "neo-liberal revolution" had taken place in the Western nations. The previous emphasis on redistributing growth through the spread of capitalism gave way to an emphasis on meeting the basic needs of the poor. It was soon evident, however, that capitalism would not give way to these more humanistic values, resulting in the 1980's shift to "Accelerated Development". This approach emphasized policy reform, technology transfer, institutional development, and increased participation of the private sector in Third World development. Green (1986) and Leys (1994) note, however, that the result was an increasingly incoherent discourse of opposites: "...the state is needed...but not too much, and only when the market doesn't work well; democracy is important but not if it leads to inappropriate demands for redistribution and so on" (Leys 1994:42-43). Inadequate attention was paid to basic problems of coordination and planning, as well as to the consequences of various policies, such as structural adjustment[75].

One consistent element throughout all of the development debate was, however, the alleviation of "poverty". The concept was never clearly defined. Piachaud (1987) and Rahnema (1993b) note the concept of "poverty" does not mean the opposite of rich, but also takes into account a lack of protection, infirmity, abandonment and public humiliation. When examining poverty and its critical relation to underdevelopment, Gordon (1972) points out that competition among paradigms resulted in competitive, mutually inconsistent ideas about poverty - as the real world appeared inconsistent with theoretical expectations. In reality, local people had to come to a point where they viewed their own state of affairs as aberrant and reversible. Until this occurred, they would remain unorganized and little able to alter their circumstances. Further, institutional adjustments would be required. My experience with Aboriginal communities in Canada convince me that both Gordon and Goulet are right: "...the problem is not merely one of developing resources in a narrow technical sense but of improving the quality of human life and of building up an institutional framework adequate to the wider ends in view"(Goulet 1971:32). This is difficult to accomplish, however, within a context of politics, paternalism and neglect. Many throughout the world, as well as in Canada, view the poor as people who make poverty a "cultural choice". In Canada specifically, this view is held by some non-Aboriginal residents about the case of First Nations reserves.[76]

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[75] In Bangladesh, Zimbabwe, and Ghana structural adjustment policies (imposed by governments to comply with World Bank and International Monetary Fund loan requirements) are driving people out from the countryside and into the urban centres. In the case of Ghana market places, the implications of structural adjustment include: currency devaluation; demand restraint, as people no longer have the buying power they once did; wage restraint; credit restraint; budget restraints in both the public and informal sectors, and revenue enhancement - higher infrastructural charges such as rent, school fees, and utilities. There has been a dramatic reduction in supplier credit available, and more traders are entering dependent relationships with the few traders who have access to capital. This is wreaking havoc with the traditional social structure as the elderly are not able to rely on children, but are still supporting them. There is a crisis of reproduction. In other words, the young people "are flunking out of the household system" (Clark 1996). In the case of women microentrepreneurs who sell fresh produce in Harare, Zimbabwe, their expertise in growing fruits and vegetables in the rural areas has been transformed to meet the needs of urban living. The economic structural adjustment program has given rise to a number of policy changes on both the macro- and micro-levels, all of which have an impact on women vendors and the urban food distribution system (Horn 1996). For additional reading on structural adjustment policies and case studies see: Husain and Faruqee, eds (1994); Kapoor, ed (1994); and World Bank (1994).

The Culture of Poverty

When concepts of development, underdevelopment, poverty and social circumstance were combined by Oscar Lewis in 1966, the result was his "Culture of Poverty". This is a theoretical framework that is **not** supported in this research. It is, however, important to understand alternative frameworks that were being promoted at the time. Put forward as a concept that would assist in correcting the "misapprehensions that have ascribed some behaviour pattern of ethnic, national or regional groups as distinctive characteristics" (Lewis 1971:27), the culture of poverty approach stressed the existence of a lower class subculture with different values, norms, ideals and behaviour which served to inhibit upward mobility. Hofley (1971) notes that individuals were viewed as the root of the problem, rather than viewing the institutions which shape the individual as problematic. The poor manifested patterns of behaviour and values, transmitted intergenerationally through socialization. These patterns were said by Lewis (1971) to be characteristically different from those of the dominant society: within the culture of poverty these values became subcultural determinants of socioeconomic status. Representative characteristics of those who existed within a culture of poverty, noted by Gans (1969), Haggstrom (1968), Harrison (1985), Hofley (1971), Rahnema (1993b), and Waxman (1983), included the following: particularistic values that stressed the intimate and sensory; deficiency in basic skills and attitudes; apathy; an orientation to the past rather than the future; a lack of rigorous ethical systems; exhibition of a high incidence of social pathology; shiftless attitudes; and a lack of desire for education. Precisely these characteristics have been applied to Canadian Aboriginal people by past Canadian governments and are not all that distinguishable from arguments made in Britain during the industrial revolution whereby:

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[76] Much to my disdain, it is my experience that many non-Aboriginal people are of the view, and willingly express this view, that Aboriginal people living on reserves make the choice to retain a low socio-economic status and that they do not enjoy working, "or else they would have jobs". The view has also been expressed to me that Aboriginal people are lazy, shiftless, and drink too much alcohol. This view is intensified when news reports of crime make it clear that the perpetrator was "a native male in his early-twenties". It is not often one hears a reporter making a reference to the ethnic identity of a non-Aboriginal perpetrator. As one government official said to me, "the culture of poverty is alive and well and living in Canada".

> ...the welfare rolls are full of employables who are unemployed simply because, being part of the culture of poverty they are lazy parasites, and that much of the remainder...consists of women who, being part of the culture of poverty, have no morals...and have flocks and flocks of illegitimate children so that they can collect more money from welfare (Waxman 1983:92).

The culture of poverty framework (or perspective) has come under a tremendous amount of criticism. This is based not only on the perception that this type of framework is, by today's standards, considered politically incorrect and racist, but by virtue of the fact that what Oscar Lewis described and others expanded upon is not a "culture" of poverty. Instead, what is demonstrated is the nature of stigma, whereby the stigma of poverty lies in the perceptions and the definitions the non-poor have of the poor: "...we form certain impressions and evaluations of that individual, and we proceed to relate on the basis of derived expectations from impressions and evaluations" (Waxman 1983:98). This will continue as long as the stigma persists, as our own place in the structure of society deeply affects our conception of reality. Aboriginal people are virtual victims of a no-win game in which they are expected to live by moral and legal standards that few middle-class people are capable of upholding.

To accept this as the end of the argument is to accept that Aboriginal people throughout the world are condemned to a life of poverty. Max-Neef (1992), Rahnema (1993b), and Sen (1984) suggest that the poor will be assisted through the recovery of their actual capacity to tap their own available resources which are totally different from what economists call resources. I am in agreement with this view, as what I term "throwing money" at a community is not going to promote long term economic development nor self reliance. This contradicts the view put forward by Harrison (1985) that the prime responsibility for development of those who fall within the realm of the poor rests with government. This is unworkable in a practical sense as the Government of Canada has played a direct role in aboriginal "development" for two hundred years, and provincial crowns for a shorter period but nonetheless with the same effect. As Borovy demonstrates, this has resulted in a deterioration of aboriginal economy and culture:

> We virtually deported the natives...to small parcels of land...far away from the mainstreams of our civilization. Then we began from every side to assault their culture and way of life...Having been denuded of their own way of life and having been isolated from ours, the Indians found themselves increasingly with nowhere to turn and nowhere to go (1971:214).

Rahnema's experiences in Third World poverty are analogous to mine in Canada: underdevelopment and poverty remain critical issues as neither the production of economic resources and commodities, nor the extension of social services have ultimately served the poor. This has resulted in a further diminishing of their capacity to meet their real needs. The experience of Pitt (1976) is also similar to mine. He notes that government-recommended courses of action based on financial considerations had little hope of "internally-generated development" among First Nations communities. This form of economic development was perceived by its originators to be an "...undisputed benefit bestowed on the poor people of the world" (Ibid:5) and that would extricate aboriginal peoples from the depths of poverty, disorganization and despair. The creation of jobs, provided individuals possessed the determination to extricate themselves from the welfare cycle, was to solve the ills facing aboriginal peoples. This did not occur, however, as there is more to the development dilemma facing aboriginal peoples than successful implementation of government economic development programs. This is summarized well by Bodley's statement regarding his work with Aboriginal people:

> ...(individuals) feel deprivation not only when economic goals they have been encouraged to seek fail to materialize, but also when they discover that they are powerless, second-class citizens who are discriminated against and exploited by the dominant society" (1990:151).

Economic growth may bring benefits to people, but development is about much more than this as it is a process of enrichment in every aspect of life. No one would deny that material benefits are an essential part of development, but the underlying principle of control is critical (Edwards 1993). Further, many efforts made by First Nations to solicit the participation of community residents in development activities, as well as efforts made by government to secure First Nations participation in development, are designed as mechanisms to obtain political advantage through a display of "participatory intentions" (Rahnema 1993a) that have nothing to do with alleviating extreme poverty in communities nor with developing human potential.

Gender and Development Theory

Issues of gender are very important to my research not only as I am a "woman in the field" (cf. Golde, ed. 1986), but owing to the fact that mainstream theoretical approaches such as modernization and dependency simultaneously overlook women, and yet exploit their contributions (personal communication, Eloise Murray, 1996). This is noted in Scott (1995) *Gender and Development: Rethinking Modernization and Dependency Theory*. Rather than "uncovering and documenting the explicitly sexist treatment of the role of women by modernization and dependency theorists"

(Ibid:19), Scott terms her method "re-reading" modernization and dependency texts in light of new questions and politicized perspectives. Questions are asked, such as how is political development defined, what aspects of human nature are assumed to be the most salient in political development, and how are obstacles to be overcome. Her second stage of analyses pertains to the idea that modernization and dependency theorists "contain implications about issues beyond their explicit content and speak to issues that are marked by gender, although there are usually no explicit references to gender as a fundamental category of analysis" (Ibid:20). This is consistent with my own reading of the literature.

Scott's re-reading of modernization and dependency has provided me with a number of insights into gendered roles in Whitefish Lake co-operative management processes and further research considerations based on the value of the work women do, the role played in resource management decision-making, and the feminine view of what it means to be "modern" in an Aboriginal community involved in co-operative resource management. Scott notes that "Modernization theory's concern with self-sufficiency and autonomy joins with assumptions about the importance of entrepreneurship to create a vision of modernity that excludes women, and perhaps depends on the exclusion of women" (Ibid:125). In the case of dependency theory anchored by the "primacy of production and class struggle", all conflicts are assumed to be struggles of production and the role of the household is usually invisible. An implicit role is provided for the household only in revolutionary theory as the last link in the "metropolis-satellite hierarchy of domination and exploitation. The inhabitants of the household, in revolutionary practice, must engage in production in order to develop genuine consciousness about the significance of the class struggle" (Ibid:126).

It is my assertion that future theoretical development - taking into account not only the rewriting of modernization and dependency, but the rewriting of many other theoretical perspectives - will benefit from a concern with the importance of entrepreneurship to create a vision that includes women, and depends on the inclusion of women. Scott notes that attempts to theorize new meanings of development will be a formidable task, as political strategies are presented in "either/or" dichotomies. These categories need to be reconsidered and reconstituted, leading to a framework that is more representative of current reality and, therefore, is more responsive to people's needs and aspirations for growth and self-sufficiency[77]:

> Being sensitive to the systemic aspects of power and the systematic ways in which race, class, and gender structure people's lives has possibilities for rewriting the meaning of "development", which after all is not only a text but a continuing effort by people and movements to realize their aspirations (Lazarus 1990:163).

Development?

Today it would appear that, theoretically speaking, the domain of development theory may not only have changed, but disappeared (Goulet 1971; Leys 1994; Schuurman 1993). Almond et al (1982), Hughes (1982), Preston (1982), Roberts (1982) and Schuurman, ed. (1993) note that development explained as humanity passing through states, accompanied by an optimistic view of human history as "progress and development" used synonymously may work in theory, but does not work in reality. Dependency and world systems approaches have come to be viewed as unworkable owing to the neglect of class analyses, the neglect of the diversity of the third world, the emphases on single sector (economy) analyses; the assumption of non-workable political options such as self-reliance, and the impossible existence of a socialist world government. "Human" development is now taking priority and the concept of "putting the last first" (Brokenshaw et al, eds. Chambers 1980; Ferguson 1994) is becoming more prevalent. Leys (1994) suggests this is preferable to "trying to breathe life back into any kind of 'development theory' whose illusory appearance of concreteness and 'practicality' depends on averting one's gaze from its lack of adequate foundation" (Ibid:75).

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[77] Future research considerations are discussed in the Postscript.

Recognizing the criticism that has been levied on the theories of modernization and dependency, aspects of these frameworks may be applied to what is happening within First Nations today. Relationships between "satellites and metropoles" may seem remote from the relationship between First Nations and the federal/provincial Crowns; however, it is not unreasonable to apply - with caution - both dependency and modernization theories to this local case. For example, the history of colonialism in existence between Britain and Canada is strong and exemplified in the fur trade[78]. As such, the establishment of the fur trade and consequent impact on aboriginal peoples is analogous to the view that "...underdevelopment occurs because countries are subject to a trade regime and produce for a world market that is characterized by unequal trade" (Schuurman 1993:8-9). The relationship between Canadian First Nations and government is a continuation of the historical context of British colonialism and expansion of capitalism into aboriginal socio-economic systems. Similar to the economic impacts of international monetary policies flowing from the Bretton Woods Conference, the last issue the Canadian governments considered was the impact of their policies, laws and regulations on First Nations communities:

> The last thing on the minds of the architects of the Bretton Woods Institutions was the impact of their handiwork on communities. Yet it is at the community level where the international economic order ultimately must be judged. In villages, towns and cities real people work, play and raise children, and it is here where they encounter the real effects - both good and bad - of the globalized economy (Shuman 1994: 188).

Unfortunately, I am of the view that this situation has not changed in any significant way - only superficially. We may draw one further parallel from modernization and dependency experiences of Third World countries: only those who are from the underdeveloped country will be able to accomplish change through understanding their own economic and social reality. Change will not be accomplished through importing "sterile stereotypes" from the metropolis which do not correspond to their satellite economic reality (Frank 1969a, 1969b). Imposed stereotypical solutions brought forward to First Nations communities by the federal government, which have not corresponded with First Nations reality, have not been successful. Examples of these include economic development programs which are too restrictive to be of any direct benefit and education programs which are culturally irrelevant. As Seers (1977a, 1977b) points out:

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[78] For discussion on the impact of the fur trade see: Morrison (1975); Morrison and Wilson (1995); Ray (1984); Ray and Freeman (1980); Reid (1985); Rogers (1961); and Tanner (1979, 1983).

> An economic system with large numbers of under-nourished and unemployed at the bottom end of a long social ladder...can never provide a firm basis for political rights...Those with high incomes from profits or salaries are not merely slow to tackle the great social problems of poverty and unemployment; they will inevitably try to find ways of maintaining privilege...(Seers 1977b:5).

It is not adequate to look only at the role of government in processes of colonialization. In many cases in First Nations communities, the rhetoric of self-reliance has taken priority over the reality of self-development. Available resources and economic power are not necessarily equitably distributed in an aboriginal community any more than they are equitably distributed between government and communities. Many leaders have "taken a page" from the development book of government and now, inevitably, find ways of maintaining their own privilege.

Many development programs have led to the worst of both worlds as the gap between the rich and poor between nations has not decreased, nor the gap between the rich and poor within nations. I have found parallels in my own research with the analyses of Bodley (1990) and Knippers Black (1991): qualified "bureaucratic rigor mortis" coupled with the unavailability or unaffordability of essential goods and services has led to chronic unemployment, unpayable debts, environmental degradation and de-localization of resources, breakdown in traditional socio-economic systems, and general powerlessness. I would add to this that attempted culturocide on the part of the Canadian government, carried out primarily through the Roman Catholic and Anglican churches also contributed substantially to the current poverty and development issues faced by Aboriginal communities as "...the concept of poverty derives from its societal context" (Harp and Hofley 1971:2).

The following chapter provides an extensive discussion of the methods used in data collection, leading to the development of the Implementation Plan discussed in Chapter 8.

5. Methodology

...development anthropologists live and work in the world that other academics write about. In principle, then, development anthropology should challenge academics to look at people, processes, politics, and institutions in real world settings, particularly those people with limited access to social, economic, and political resources.

David Gow "Doubly damned: dealing with power and praxis in development anthropology". In: *Human Organization* 1993:381

My approach places application at the heart of community forestry, as one of the fundamental reasons for studying indigenous knowledge...much of what passes for applied and development anthropology today looks like "research-as-usual", with little of it being returned to the people, reinvested with them, for their benefit. Similarly, too little of our important research findings get passed on to development agents in readily comprehendible form for their use in benefiting those for whom development is ostensibly targeted.

Michael Cernea in D.A. Messerschmidt, *Anthropological Forestry: View From the Himalayas*, 1991:12.

So, there I was, talking with the woman in the vehicle pool about renting a suburban to take into the field. When I mentioned I was going into the Cree community of Whitefish Lake, Alberta to do my research, I was advised by the woman to take tobacco because, after all, didn't I know that all Indians really like tobacco? They are really friendly if you offer tobacco and you will become friends.

Anonymous, February 1996.

...the fear of contradiction probably stiffens far more of our interpretive writing than does the concern for validity.

Harry F. Wolcott *Transforming Qualitative Data* 1994:38.

Introduction

This chapter flows from my own experience and the use of methodological approaches that have provided me with a research roadmap. The importance of ethics in conducting research of this nature is noted, followed by a discussion of the relevance of action and research-development approaches exemplified in the Fox and Vicos projects to applied anthropology. I will then describe and analyse methodologies used in my fieldwork, including: the nature of the information collected; how data were collected; the methods chosen and why; and problems involved. This will be followed with a brief discussion of the issues related to the relevance of participatory approaches and issues of gender in this research.

When I returned to the university after a decade of living and working in applied development settings, I had difficulty with what I termed the "academic" approach to development anthropology. Part of my exam requirements included learning about past development projects such as Tax's work with the Fox Indians of central Iowa and Holmberg's work at the Vicos hacienda in Peru, and the colonial roots of our discipline. My reticence was short-lived as elements in past initiatives were relevant to my own experience and research. These initiatives also contributed to my practice of applied anthropology as I examined critically my own role in development processes. Part of this critical examination involved looking at the process of the applied anthropologist in finding a place in the cultures of others and finding a place in the home culture[79]. This was helpful in developing a more objective approach to research and avoiding what I now term "the White Knight Syndrome"[80].

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[79] Messerschmidt (1981) provides an extensive discussion on the issue of studying one's own society in the volume he edited entitled *Anthropologists At Home in North America.* In my research I have carried this premise one step further in researching an issue of relevance to indigenous people and the interaction with those considered to be part of my own society: government and industry. The distinction between these groups is, however, blurred to say the least. I have found the following references regarding indirect and/or direct applications of reflexive approaches useful in studying both my own society and others: Agar (1980, 1986); Bourdieu (1986); Bourdieu and Wacquant, eds. (1992); Calhoun et al, eds. (1993); DeVita,ed. (1990, 1992); Freilich, ed. (1977); Gearing (1970a, 1970b); Geertz (1973, 1983, 1988, 1995); Golde, ed. (1986); Powdermaker (1966); Sanjek, ed. (1990); Warren (1988); and Wax (1971).

[80] This is a term used to describe certain 'developmentalists' coined by a friend and eventual supervisor, Dr. Clifford Hickey, in discussions regarding impression management and transference. As applied anthropologists have a role to play in creating a more humanitarian world, it is very easy for us to make the mistake of assuming we can solve more problems than we possibly can. It is also easy for us to identify with those with whom we are working. This has dangerous parallels with the "White Knights" of the crusades, valiantly mounting their horses and charging off to right the injustices of the world - injustices according to perceptions of White Knights. In the case of applied anthropology, to do this is to cause more harm than good as we mount our horses, and ineffectively gallop off in all directions at once.

This also assisted in drastic revision to my previously-held view that as applied anthropologists, we should be able to function effectively and patiently in every field setting. Bourdieu (1986) and Wolcott (1994, 1995) discuss extensively the recognition that the anthropologist is not an integral part of the culture being studied and that all observations and processes are subject to the interpretation of the individual. Geertz points out the applied anthropologist who is perfectly attuned to surroundings is a myth[81]:

> Ethnographers are not like chameleons. We cannot change our personalities to fit our field situations. We can learn more about who we are when we see ourselves through the double-sided looking glass of our ethnographic lens. Our data result from the cumulative experiences of our interactions with our informants (1983:56).

As applied anthropologists we must try to see things as they really are. Otherwise, we may do more damage through our attempts to re-shape the reality of others to fit our idea of what it should be, than if we had never been there at all. American activist Saul Alinsky had a sound idea when he wrote "...I start from where the world is, as it is, not as I would like it to be" (Alinsky 1989b:xix).

Methods in Development Anthropology

> If the real radical finds that having long hair sets up psychological barriers to communication and organization, he cuts his hair. If I were organizing in an orthodox Jewish community I would not walk in there eating a ham sandwich...(Alinsky 1989b:xix).

The kaleidoscopic behaviour of people within the context of culture is recognized and appreciated for all it can offer in applied anthropology. We are the outsiders brought in because our professional approach to problems has something to offer which other approaches do not. Our emphasis on culture provides us with the foundation to pinpoint underlying (especially structural) issues involved in cross-cultural development and resource management, rather than providing only superficial alternatives to the underlying problems. Much of this has to do with the assumption of roles by applied anthropologists and the relationships between and among these roles.

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[81] Geertz notes that Malinowski's *A Diary in the Strict Sense of the Term* made it clear that established accounts of how anthropologists work in the field were quite implausible. This publication contained a number of points that demonstrated "Malinowski was not, to put it delicately, an unmitigated nice guy" (Geertz 1983:56). However, the fundamental point of how anthropological knowledge is possible in the first place is more important than Malinowski's apparent lack of enthusiasm for fieldwork.

Roles and Relationships in Applied Development Anthropology

Understanding the "role of roles" is necessary to understand the problems we face in applied work, as practitioners assume a number of different roles depending upon the circumstance. Van Willigen (1993) divides the range of roles available based on the production of information, policy, and action. Divided into two broad categories of intervention and policy research, roles played in furthering development projects include: research and development, community development, advocacy, cultural brokerage, social marketing, action research, socio-economic impact assessment, evaluation and monitoring, technology development research, and cultural resource assessment. Community contexts are considered, project outputs in estimating social impacts assessed, administrative arrangements implemented, characteristics of project staff considered, and political influence accounted for (B. Morrison, personal communication 1993; Finsterbusch and Partridge 1990; Van Willigen 1993). It is my experience, and those of Gow (1991), Salisbury (1996) and Warren (1988) that the roles played are often contradictory and, for example, resemble a cross between a missionary, a cultural broker, and a Mata Hari. Van Willigen (1993) and Wolcott (1995) make the point that no matter what role we are playing, the focus of developmental work must remain on reality "that we perceive through what we have learned as anthropologists" (Van Willigen 1993:229). And we must remain acutely aware of the perceptions held by others about the roles we are assuming.

In my current research, acceptance - of both me and the research process - by all stakeholders was required to ensure an information flow between and among stakeholders. This was impacted by the various perceptions members of each of the stakeholders held regarding my roles(s), as well as the perceptions held regarding the roles of the other stakeholders.[82] These perceptions have an impact on action taken and it is my experience that while an anthropologist can provide and present information, what the stakeholders do with this information and how they respond to it is another matter.

Ethics

Denis Goulet (1971) brings applied/development issues into perspective as development presents decision-makers with a number of "cruel choices" that bring questions of equity, integrity, and justice into the open. Ethics are critical to the choices made by both the anthropologist and by those with whom we work. Van Willigen (1993) states that ethics should not be viewed as an afterthought to planning and project implementation, but as a guide to effective practice. Van Willigen further points out that ethical standards are difficult enough to specify, let alone apply consistently - although applied anthropologists are trained to respect the values and ethics of others. Alinsky (1989a, 1989b) and Van Willigen (1993) note that this leads to the sometimes confounding question pertaining to the ethics of means and ends, and the qualitative nature of the relationships between them. The particular end must justify the particular means used, and the means can be selected only from those which actually exist. This is indeed true; however, it is my experience that Alinsky's "ethics is doing what is best for the most" (Alinsky 1989b:33) is not ethically sound and echoes the colonial history of anthropology. My own field experiences and those of others such as Agar (1980, 1986), Clifford and Marcus eds. (1986), Geertz (1988), Golde (1986), Powdermaker (1966), Warren (1988), Wax (1971) and Wolcott (1994) demonstrate that Alinsky's definition of ethics puts a substantial burden on both the anthropologist, and those with whom the anthropologist is working, to determine what is best for the whole. We cannot, nor should we, determine what is best for the whole as this is not our determination to make. All we can do is contribute to informed decision-making by the whole.

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[82] Now-retired liberal senator Keith Davey, referred to by Canadian Liberal politicians as the "Rainmaker", often made the statement that "in politics, perception is the reality". This is very true in the issue of co-operative management of resources. At various times, members of the Aboriginal community viewed me as a staff member while officials of government viewed me as an employee of one particular department. These perceptions would shift over the course of the research, depending upon the context and the stakeholder.

Moreover, issues of ethics are not as clear in the real world as they are in the literature. Ethics have a direct link with values and Cochrane (1971) writes that applied anthropology has never succeeded in separating questions of science from personal values. This causes a problem as values are not an exact science. Morrison (1977) writes that to ignore the values, the emotions, the attitudes, and the meanings on the part of either the informants or the researcher is to miss the critical human element in terms of the people and the research enterprise, and to open oneself up to breaches of ethics - however unintentional. This is complicated further by the fact that as we debate the means/ends issues in applied anthropology, we are increasingly involved in development through our support of local self-determination. As we involve ourselves in community-based research we cannot "sit on the sidelines" and do nothing. Cochrane (1971) provides a succinct statement regarding the practice of developmental anthropology: there has never existed an ethics of result - only of intention. This is a statement with which I fully agree. We must look closely at our own intentions and ensure that all available facts are taken into account. Both the benefits and costs of development must be weighed [83]. It is evident that ethics represent questions and issues of balance.

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[83] At a conference I attended in 1996, an American doctoral student was interested in making films about peoples living in developing countries that he considered to be oppressed. One example in particular struck me as particularly dangerous, which relates to the filming of perceived abuses of women's roles in obtaining development loans flowing from World Bank structural adjustment implementation in a developing country. There may be some question as the actual beneficiaries of the loan being the women, or whether the women are being used by male heads of households to obtain money for male business enterprises. Rather than give consideration to both domestic and business impacts of putting this on film as part of a documentary series on the perceived failure of structural adjustment, the student appeared to be consumed only with "exposing" what he termed

In order to grasp the crucial role played by ethics in current practice, it is helpful to understand past practice. The debate surrounding ethical issues reached a peak during the Vietnam war as "tensions of that period were exacerbated by a series of ill-conceived and unethical research projects" (Van Willigen 1993:42).

Project Camelot

In 1964 Project Camelot was initiated by the Special Operations Research Office of the United States Army. The stated objective of the project was "...to determine the feasibility of developing a general systems model which would make it possible to predict and influence politically significant aspects of social change in the developing nations of the world" (Van Willigen 1993:49). Anthropologists were hired to carry out the research and initial activities were set in Chile. The intent was to expand Project Camelot to cover a large number of countries in Asia, Latin America, Africa and Europe. The project was short-lived. Many academics and other concerned individuals objected to the use of social science to maintain the social order in countries where oppression was evident. Project Camelot, as an example of academic participation in counter-insurgency efforts, was not supported.

Important to the practice of development anthropology, the research involved in Project Camelot had strong political implications as social scientists were being asked to take part in research that would facilitate interference by the United States in the affairs of other nations. As a result, the American Anthropological Association passed resolutions condemning clandestine research and research pertaining to counter-insurgency. A short time later, however, the Thailand Project was initiated.

The Thailand Project

During the Vietnam War, various northern hill tribes in Thailand were

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an oppressive system.

characterised by the United States government as the minority suppressed by the politically dominant lowland majority. This was not, however, the major research attraction. While these highland groups were isolated, they were linked with the outside world through the export of the major cash crop of the area - opium. The international community was putting increasing pressure on the Thai government to control the opium traffic.

The significance of this region increased dramatically for reasons other than the control of the opium trade. As discussed by Van Willigen, the perception held by the United States government and others was that "these highland groups were viewed as good candidates for subversive activities and had not demonstrated loyalty to the Thai government" (1993:50). To facilitate a restriction on "subversive" movements by the hill tribes, substantial research monies were made available to anthropologists through the Advanced Research Projects Agency of the United States Department of Defence. Anthropologists flooded the area under the auspices of the Hill Tribes Research Centre - ostensibly to study these hill people. This continued until public pressure in the form of anti-Vietnam protest movements brought the project to a close in the early 1970s[84].

Roles and ethics discussions are merely words on paper unless they are put into a context of research and practice. Two classic examples of context are provided in what are known as the "Fox" and "Vicos" cases. The approaches used in these case studies have been significant in my own research.

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[84] As a result of the colonial history of applied anthropological research and the sometimes appalling lack of regard for the humanity of those we study, in 1983 the Society for Applied Anthropology outlined an Ethics Statement. Reprinted in Van Willigen (1993) , the Statement provides guidelines pertaining to disclosure, participation, informed consent, confidentiality, communication of information, and our primary responsibility to protect those with whom we work. This statement is reprinted in Appendix I. For a substantial discussion of ethics as per the American Anthropological Society, see *Anthropology Newsletter* 37(4), April 1996.

Action Anthropology: General Approach

Chambers (1985), Schensul (1974) and Schlesier (1974) point out that since the early 1950's, anthropologists have responded to a need for action when the interests of those who governed did not seem to coincide with the interests of those who were being governed[85]. Anthropologists "saw a people caught by poverty and economic exploitation; by discrimination and unequal treatment in the courts, law enforcement agencies, and schools; by unemployment, underemployment, and public-welfare dependency; by intragroup stresses leading to extreme alcoholism..." (Schlesier 1974:278). Today the action approach remains effective and demonstrates particularly challenging field opportunities. Discussed extensively by Gearing (1970a, 1970b), Schensul (1974) and Schlesier (1974), the anthropologist is both student and teacher simultaneously as "action anthropology sets out to help while learning and learn while helping, in equal emphasis" (Gearing 1970a:60). As a result, research contributes to indigenous social action and community development.

Referred to by Van Willigen (1993) as a form of intervention anthropology, the anthropologist actually intervenes in community development processes where the community has experienced a history of colonialism. The anthropologist and the community determine the problems to be worked on and the possibilities for change. Peattie (1958, 1970), Redfield (1958), Tax (1958) and Van Willigen (1993) note that means and ends are not distinguishable where the community itself is directing the process. As a result, the research process is rather "...a continuous process of discovery and action and valuing..." (Peattie 1970:123). Accordingly, the researcher must be prepared to encounter and sort through complex values and perceptions. This is not a simple task as the researcher is faced with problems that are impacted by perceptions and values of the anthropologist, of community members, and of surrounding communities. The anthropologist has to make assessments that are based on the value orientation of the community - not based on her own values. My own use of the action approach is similar to those noted previously: "what works" is situationally-specific and depends on the willingness and capacity of both the community and the anthropologist to make changes. My current research provides a clear demonstration of the processual nature of discovery and the critical importance of plans derived from the values of the "community" - not from my own values.

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[85] While not discussed here, there is an extensive body of literature on the approach of community development, which arose during the 1950's. The underlying concepts used are: self help and group action through community participation and cooperation; and the reaching of ideal goals such as self determination, reliance and government. These actions were to be accomplished through methods such as: the determination of felt needs; and the need for technical assistance from outside agencies and individuals. For further reading see: Biddle and Biddle (1965); Cary (1970); Erasmus (1968); Goodenough (1963); Mackie (1977); Spicer, ed. (1952); Spicer (1958); and Sweezy and Honigman (1963).

Power is a critical element in research settings where action methods are used. Clifton (1970), Chambers (1985) and Van Willigen (1993) point out that if the anthropologist is placed in an administrative role defined as power-holding or attempts to control the pace of change, the action approach becomes virtually impossible to use. Peterson (1974, 1978) notes that even the perception of power attributed to a researcher by community members can be critical in the potential de-railing of a research project[86]. Interpretation and impression management are also important factors, noted by Berreman (1962). It is clear that interpretation is not only the role of the anthropologist, but of community members as well[87]. This complicates research.

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[86] After working with the Choctaw for a number of years, Peterson's job duties brought about a new designation as "Chief of the Planning Centre". While seemingly innocuous, this led to remarks such as "now we have a white man chief" (Peterson 1978:174). This indicated Peterson was now viewed by the community residents as someone in a position of authority who was responsible for telling others what to do. This was culturally-inappropriate and professionally fatal, so the solution was to insert an article in the local newspaper with the headline reading: "Anthropologist Appointed Tribal Aide". This resulted in the re-establishment of more equitable power relationships between researcher and community.

[87] Berreman's work in the Himalayan village of Sirkanda is illuminating in understanding the role impression management and interpretation play in anthropological fieldwork, and stresses the fact that we are not as sensitive as we need to be at times. Berreman discusses attempts to convey a desired impression of one's self. At the same time, we attempt to interpret the behaviour and attitudes of others as this is critical to ethnographic research. He discusses the implications of status differences of informants, access to information, distrust of his role as a researcher, and inadvertent disrespect. It is my experience in the conduct of action research that this statement by Berreman is all too true: "The initial response to an ethnographer...is probably always an attempt to identify him in familiar terms; to identify him as the performer of a familiar role. The

Action Anthropology Case Study: The Fox Indians

In 1935, Sol Tax completed his Ph.D. dissertation (unpublished) on his fieldwork with the Fox Indians located in central Iowa. Gearing (1970a, 1970b), Gearing et al (1960), Tax (1958) and Van Willigen (1993) note that traditional tribal structure could not cope with the changing white-dominated environment, and suspicion between the Fox and other residents of the area had grown. There was little or no communication between the two, and non-Fox promoted the view that the Fox community would cease to exist in two generations and would be assimilated into mainstream Iowa society[88].

With these conditions in mind, in 1948 the University of Chicago requested Tax to look into the possibility of using the Fox community as a student fieldwork site. Tax's intention was to begin traditional research linking means with ends. Gearing et al (1960) and Van Willigen (1993) both stress the problem of determining the extent of the relationship between action and goal: the separation of the role of scientist and the role of practitioner.

The Fox Project demonstrated that means and ends cannot be separated when carrying out action-based research, as the project quickly became one of applied development and involved "...a special kind of relationship between a changing community of Fox Indians and a changing group of anthropologists" (Van Willigen 1993:63). Van Willigen notes the role relationship characteristic of action

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impressions he makes will determine how he is identified (Berreman 1962:13).

[88] This is similar to the perspective taken by the Government of Canada regarding Indians. The principles of past Canadian policy were established by the time of Confederation in 1867, with complete assimilation regarded as the only acceptable end. Consistent with this view, in 1969 the *Statement of the Government of Canada on Indian Policy* (Department of Indian Affairs and Northern Development), known more informally as the "White Paper", was issued. The goal was assimilation through termination of all special rights. The rationale was based on the idea that special legal status and policies were keeping Indians apart from and behind other Canadians. The White Paper received a less than sympathetic response from the public and nearly unanimous rejection from the Canadian Indian population (Ivanitz 1985).

anthropology as the students were faced with issues of providing assistance to the Fox under the direction of the Fox, while learning about problems as they arose. The collective focus of the students became Fox problems rather than scientific problems, and Fox problems became the scientific problems. Tax (1958) writes that - interjected throughout - was the question of values, action required to assist the Fox, and the timing of such action: who decides the Fox future - we or they?

This project forced a drastic revision of Tax's view exemplified in a letter from Tax to Peattie in 1948:

> ...my ideas about the relations of research and social action have been a little bit up in the air in the last couple of years, but have been coming down to earth gradually... I don't believe that you can do 'pure research' among the Fox except if you also do ...'action research'...I think that the 'participant observer' method might very well be taken to mean the 'interferer observer' method because in any situation comparable to the one you are in...you are bound to be interfering with what you are observing (Gearing et al 1960:32).

By the close of the project applied social research had advanced greatly through the recognition that research approaches may change drastically as the research progresses, and the result can be revolutionary. In order to be effective, however, the researchers must be willing to pursue the new direction taken. I have found this to be true in my own experience, as many times I have had to change my approach according to the shifting nature of a research problem brought about by such factors as changes in government. I have also experienced similar personal changes as those brought about in Tax's students as a result of participating in the research process. As with myself, these students learned about themselves as anthropologists and as people leading many of them to re-examine their interpretations of the world. Gearing writes:

> ...we can't prove the interpretations of the behaviour we see...In action the interpretations are not lightly made, since they are acted upon, and are cumulative. For the same reason, they are often tested soon; the anthropologist gives himself a great deal of trouble with a bad hypothesis, and before long becomes extraordinarily sensitive and

> caring...Most of us, I believe, play poker less carelessly when the stakes are high. In action at every point we play for keeps (Ibid:306).

Research and Development Anthropology: General Approach

Action anthropology and research and development anthropology represent a post World War II shift to more liberal-democratic emphases on equitable representation and furthering the self determination of those less powerful. Lasswell (1971), Stavenhagen (1971) and Van Willigen (1993) note the focus of the research and development approach on humanistic values discovered through exhaustive research-based participant intervention and cultural analyses. The use of this approach was intended to improve the long term adaptability of communities and equalize power imbalances through the assumption of power by the research and development anthropologist. This power would eventually be devolved to the local community. The timely production and dissemination of research results also was important in the sense that this was the essential role of the anthropologists, and this implied that "planned change", without the involvement of community residents was impossible. On-going communication with community residents and leaders by the anthropologists was crucial to the process.

Case Study: The Vicos Project

The Vicos Project was carried out in Peru from 1951-1964 in joint partnership between Cornell University and the Indigenous Institute of Peru. Vicos hacienda covered over 30,000 acres of northeastern Peruvian highlands, inhabited by approximately 2,000 Quechua-speaking Indians who had experienced only minimum contact with the outside world. They worked the land as serfs or peons with no security of tenure. Holmberg points out that "the goal of the traditional Vicosinos was simply to survive as long as he possibly could, knowing full well that he might be a victim of fate at any moment" (Holmberg 1970b:43). The hacienda itself was run by an individual referred to as the "patron" and it was not in the interest of the patron to change the system. Racism and paternalism were evident:

> At the onset of the...project, Vicos was occasionally visited by the octogenarian parish priest, a mestizo holding negative attitudes about the human potential of the Quechua serfs. During a rare appearance at an Indian's funeral his acolyte shaded him with an umbrella as he prayed at the grave side, the bible in one hand and the other outstretched to receive a pitiful stream of coins dropped by the bereaved. When the coins ran out, the prayers stopped in mid-sentence (Doughty 1987:129).

Prior to the commencement of the Vicos project, anthropologists approached the study of culture change from the perspective of the outside observer. Few attempts had been made to approach the study of change from the perspective of what Holmberg termed the intervening participant [89] (1955, 1958, 1970a, 1970b). Dobyns et al (1961) and Tax (1945) note that Vicos provided an opportunity for the observation of planned change. Holmberg (1958, 1959), Chambers (1985), Doughty (1987), Gray (1987), and Van Willigen (1993) note that anthropologists could play a central role both as researchers and as policy makers by creating a loop between theory, research findings, policy, and action. This process, along with inputs from the community, would determine the conditions necessary for both social and technological change. The implementation of political action goals[90] was necessary

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[89] There is extensive debate in Canada among applied anthropologists, First Nations, other Canadian indigenous communities such as Inuvialuit, and what are termed "consultants" regarding the role that these outsiders should play in the determination of local community processes. There are many instances, particularly in the area of aboriginal self government, where much of what is developed as a "self government" position is actually determined by a non-aboriginal consultant. This process of colonialism and paternalism is not restricted to the private consulting sector only, although those confined to the parameters of academic institutions would prefer that this myth remained intact. Indeed, many academics themselves make their careers out of creating dependencies rather than fostering empowerment. This has impacted drastically on the role of applied anthropologists, as until those with whom we work can see that we are not involved to accumulate power or control community life, we may be walking on thin ice in terms of even cursory acceptance of our present. Often, we are accepted not because we are anthropologists, but in spite of being anthropologists.

[90] Chambers (1985), Doughty (1987), Holmberg (1958, 1962, 1970b) and Van Willigen (1993) note the plan of operations for research at Vicos based on principles of: the promotion of human dignity; the formation of institutions which would allow for a wide shaping and sharing of values for all participants; the devolution of power to the community; the production and broad sharing of greater wealth; the introduction and diffusion of skills; the promotion of health and well-being; the enlargement of the status and role structure; and the formation of a modern system of

"to encourage the people living on the hacienda to seek autonomy and become a free community" (Ibid:22). While the role of power-broker was assumed by Holmberg, it was done so with the aim of guiding the Indians to self sufficiency rather than "perpetuating the chain of dependency normally associated with Latin American agrarianism" (Chambers 1985:87;22). Holmberg's intentions were to see that local people were able to take over the decision-making processes related to the operation of the hacienda, as well as those related to the betterment of their own lives as quickly as possible. For the people of Vicos if any positive change was going to occur within the community, problem-solving and decision-making organizations within the community were going to have to be established. It was the intention of the Cornell project to ensure these organizations "could gradually assume the responsibilities of leadership in public affairs along democratic lines" (Gray 1987:121).

By 1961 it appeared the project had accomplished the introduction of a series of dramatic changes. The hacienda was purchased by the Vicosinos and the traditional authority structure was replaced with a form of elected representation. Holmberg had devolved his patronal decision-making power to Indian leaders. Lasswell(1971) puts forward the view that the success of the Vicos project was based on the commitment of the participants to human dignity and other values. While this is indeed true, I am of the view that this explanation is incomplete. Issues of knowledge and authority may have had just as much of a role to play as a commitment to human values. In my view, Lasswell's analysis of the Vicos success, while heart-felt, is naive in that there is little room for attributing to the Vicosinos those human characteristics that give rise to change and the accumulation of power for personal goals, rather than for the common good.

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enlightenment through schools and other media. To support these principles, operative conditions were required: a comprehensive perspective of theory and action; community interest and support; the ability to operate over an extended period of time; and a willingness of the parties to make significant political and economic commitments to the project.

As Doughty (1987) and Gray (1987) point out in their discussions of Vicos, it is impossible to promote change in any society so that it resolves all problems to the satisfaction of everyone. It is my experience that this is very true. In the case of the Vicos project, development by the Cornell research team was viewed at times as coming from outside, rather than within. Gray's criticism of Holmberg linking the Vicos project to the concept that "culture is irrelevant to capitalist needs and so is outside its economic and political sphere of understanding" (Gray 1987:129) is, however, extreme. The Vicosinos themselves were not absent when these changes took place. It would, therefore, appear that these criticisms of the project fall victim to their own critique: treating the Vicosinos as passive bystanders in their own culture change process. Another criticism of the project was based on American political culture of the 1950's-1960's. Gray (1987) discusses at length the idea that Holmberg was viewed as attempting to eliminate the threat of communism from Latin America with the support and encouragement of the upper echelons of the United States government. Criticism notwithstanding, Holmberg had undertaken a massive task in the implementation of a distinctive intervention strategy: research and development were inseparable from theory building, and significant change required long term commitment.

The Vicos project provoked widespread opposition as well as support in the United States and Peru in academic and government circles, among development specialists and, not surprisingly, among traditional Peruvian elites. Holmberg recalls:

> As you can readily imagine, such action on my part clearly shook (or perhaps I should say shocked) the Board of Trustees - to say nothing of the some 2,000 residents of the hacienda and no few of my anthropological colleagues - to the extent...that had events subsequently taken other turns than they eventually did, I would probably not be writing this and would be much more in disgrace as an anthropologist and human being...(Holmberg 1958:12).

It is impossible to determine how the Fox and Vicosinos would have fared had there been no projects. Mangin (1979) makes a good point that the support for the

Vicos project has "gone up and down in 25 years along with the progress of the project as "...one sees there is no end, no conclusion, no success or failure. Some years things look good, some not so good" (Ibid:82).[91]

Discussion: Fox and Vicos Methodologies

One of the fundamental differences between the action and research/development approaches is on the assumption of power: the research and development anthropologist assumes power where appropriate, whereas the action anthropologist avoids the assumption of real or perceived power. In his action research, Tax worked out solutions to problems encountered by the Indians, with the Indians, as these problems arose and demonstrated that it is possible for anthropologists to work directly for and within the community, rather than on behalf of government or development agencies. In contrast, Holmberg assumed power to initiate steps that would move Vicos in the direction he defined. The Vicos project demonstrated that anthropologists could play a central role both as researchers and as policy makers - in conjunction with local communities. This is noted by Redfield in his analyses of both projects in 1958:

> In the action anthropology of Tax and Holmberg's remarkable work at Vicos are represented by the anthropologist-intervenor, the man who both seeks theoretical knowledge and also strives to bring about or assist to bring about a local improvement in human welfare. Both hope to do both good and science...For Tax the supreme such value is self-determination; for Holmberg it is a cluster of values headed by human dignity (Ibid:20).

Redfield knew that neither Tax nor Holmberg could have any idea of the impacts brought about by the work they had undertaken. Both researchers knew that it was up to them to try to determine possibilities for change and the degree to which invention/interference was warranted and possible. Tax also realized the fact that a chance was being taken as he stated in correspondence with Lisa Peattie: "We might get into trouble and we might get kicked out of the place, but that's the chance we have to take" (Gearing et al 1960:33). It was a value choice of both researchers to intervene.

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[91] When I initially moved to the Western Canadian Arctic to begin my first contract, I was told by Inuvialuit Elder Mr. Billy Day that success was not measured in how much paper you made, but in whether or not a little kid became interested in school because of what you were doing. Or maybe because a trapper had more gas for his skidoo because of funding you helped him get. Mr. Day taught me, through practice, that in applied anthropology there indeed is no end, no conclusion, no simple success, no simple failure.

The reflexive nature of the work undertaken in the applied intervention settings such as Fox and Vicos has also been recognized. Gearing came to recognize himself in another guise: "...that guise is of course the codes, the cultures, carried in the heads of men to their encounters there affecting their behaviours. When he elicits the codes one sees through them the man, the universally human, oneself. The face of the Fox is your own" (Gearing 1970a:128). No longer able to support ourselves in the role of Star Trek's Captain Kirk and non-interference, reality since Fox and Vicos demonstrates that as applied anthropologists, we find ourselves in what has been termed "the maelstrom of conflicting professional, political and ethical currents" (Stavenhagen 1971:341). We make the choice to work in this environment and prior to the application of scientific activity, must realize the implications of choices. As noted by Chambers, every endeavour in anthropology is a study in professional ethics and "(if) we accept the idea that social science cannot be divorced from ideology, then every effort in anthropology is also a study in morality" (1985:328).

Also part of every doctoral effort in anthropology is the writing of a dissertation - including the methods of "how and why I did what I did". Through the course of my career I have come to recognize that research is a process, not an event. Components of research are also part of process, with other processes occurring within each component. Wolcott devotes a book to the notion that description entails both art and science and is an intuitive, as well as objectifying, process. He notes that description "requires not only a sense of what to observe and report but exquisite judgment about what not to report, a keen sense of what is focus, what is periphery, and how to maintain a perspective and balance between them" (1994:56). It is important in qualitative research to answer two fundamental questions: 1. what do we take for data; and 2. what do we do with the data we take. This is complicated by the inevitability that we are never going to get all of it right, as description can never be free of the interpretive frameworks that drive it:

> Our capacity for inference...enables us to figure things out, to make sense in a world of partial and incomplete transactions. But it plays havoc with our need...in certain roles...to recognize the difference between what we actually observe and what we think things mean, how we wish things might be, or what we believe things ought to become (Ibid:169).

Whitefish Lake Application

The first step to completing my Ph.D. research was choosing a single research site out of what seemed to be endless possibilities. This was an arduous process, as many issues and locations presented themselves as viable alternatives. My supervisory committee lived through my many ideas and shifts in the first year of my program. Through these changes, however, one primary focus remained intact: my research had to be relevant and useful to all who were to be involved - including myself.

Following consultations with First Nations, government officials, academics, field colleagues, and review of options, I did not arrive at the choice of one research site, but three sites: the community of Whitefish Lake, Alberta, and the boardrooms and offices of government and industry. The implementation of the cooperative management Memorandum of Understanding and development processes were chosen as the subjects of my research. My initial contact with the community of Whitefish Lake was facilitated through the Chief Executive Officer of Alberta Aboriginal Affairs and the manager of Whitefish Lake Logging Co. Once this was established, Chief Eddie Tallman of Whitefish Lake First Nation facilitated my contact with Steering Committee representatives from the Alberta government and with the remaining stakeholder, Tolko Forest Products.

As I have spent a decade living and working in aboriginal communities throughout Canada, I decided that I wanted my research to go beyond usual ethnographic limits, that is, spending a substantial period of time physically located in a First Nations community. Further, the nature of my research dictated that this was not a reasonable approach, as this "ethnography" essentially spans three stakeholders in the cooperative management process: Whitefish Lake First Nation, the Government of Alberta, and Tolko Forest Products. As a result, it was necessary to have reasonable access not only to the community, but to the boardrooms and working environments of corporate/government bureaucracy, geographic information systems consultants, and the forest company. The initial project focus was designed to result in the presentation of a series of cooperative management models to the MOU Steering Committee. My fieldwork has demonstrated, however, that what was required is an implementation plan, rather than a presentation of a series of models. The Implementation Plan[92] is based on: resource management experiences from around the world; principles of sustainability; long term economic viability; implications of traditional land use; forest management planning; government policy; and statutory requirements of First Nation/government/industry resource management agreements.

The term "co-operative management" has been defined and the reasons for its use made clear. Further, other management terms such as "co-management" and "joint management" have been taken into consideration. The definition of terms was critical as the past use of these terms, in the absence of clear definition, has provided a forum for rhetoric that has little practical relevance to policy development and implementation. This ambiguity of definition has had a direct impact on the effectiveness and efficiency of resource management implementation plans between First Nations, the Government of Alberta, and industry. The definition of terms is the agreement itself.

When I was considering methods that could be useful, I found it necessary to ensure that I was not rejecting the "traditional anthropological" methods of participant observation and semi-structured interviewing in favour of "flavour of the month" methods based on extensive self-reflexivity[93] and post-modernism. What I learned through this process is similar to the Fox researcher's experiences in that all approaches have something to offer, and it is up to the anthropologist to determine: a) what will work best at the time within the context available; and b) the selection of the appropriate combination of methods. These choices are mitigated constantly through the reality of working with human beings who have their own ideas of how things should work. This was further complicated by the fact my research was not standard in that the three stakeholders involved in the cooperative management process are treated with equal weight: the aboriginal community is not singled out as the anthropological informant. As a result, methods had to be chosen that were effective in the short-term and would lead to the intended outcomes of a dissertation and a useful cooperative management model for the stakeholders.

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[92] The reader is reminded that the Memoranda of Understanding and Agreement represent cooperative management agreements, and establish the terms for a timber quota.

Fieldwork: Access, Consent and Process

The first phase of my field research was to obtain informed consent from the following: the Chief of Whitefish Lake First Nation[94]; the Chief Executive Officer of the Government of Alberta Aboriginal Affairs; the Assistant Deputy Ministers of the Forestry and Fish and Wildlife Divisions of Alberta Environmental Protection; and the Woodlands Manager of Tolko Forest Products. After gaining support from the Chief Executive Officer of Alberta Aboriginal Affairs, my next priority was working with the community of Whitefish Lake to determine whether my research could be of use. The Chief Executive Officer of the Department of Aboriginal Affairs facilitated the meeting process, and I was able to work with the manager of Whitefish Lake Logging and the Chief to determine project feasibility. A number of meetings took place and it was agreed that this project could serve three purposes: 1. completion of my research requirements; 2. cooperative management development; and 3. enhanced community participation and awareness of forest management planning. A continuation of this relationship in a positive way required the exercise of proper judgement and discretion on my part, stressing the processual nature of the work.

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[93] Wolcott (1994) notes that the excesses of this approach are reflected in an interview conducted by a post-modern ethnographer. Upon concluding an informal interview, he says to the interviewee, "Well, that's the story of my life. Do you have anything to add?"

[94] In the case of Whitefish Lake First Nation, the support of Chief and Council is recognized by obtaining informed consent and meets political and practical requirements of the community itself.

Once the Chief of the First Nation and the Chief Executive Officer had given permission, [95] I approached the other stakeholders [96] to obtain consent. My approach to all stakeholders was based on direct and clear explanations of intent, and treating individuals with respect and appreciation for what they know and what they think they know. Reciprocally, I found that these same individuals treated me with respect for what I know and my willingness to learn[97]. Stakeholders had to feel confident that this project would be useful and would not harm what was a highly-charged, politically-sensitive process. Owing to past experience, I had the confidence of the Chief Executive Officer of Aboriginal Affairs and through him, I was able to gain access to those people who could give the go-ahead for my research. Consent was obtained (at the invitation of the Chief of Whitefish Lake) during a meeting of the First Nation, Alberta Government, and President of the Canadian Association of Petroleum Producers[98]. This was facilitated through introductions of myself and my research to the other parties in attendance by the Chief of Whitefish Lake and the

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[95] Copies of the informed consent letter are contained in Appendix J.

[96] The term "stakeholder" does not mean only those signatory to the Memorandum of Understanding/Agreement or the Land Claim. Tolko Forest Products is considered in my research as a stakeholder as the company is contracted by the First Nation to log within the terms of the deciduous timber permit. Tolko is included also as it has its independent logging contracts with the Government of Alberta on land considered by Whitefish Lake to be "traditional territory".

[97] This experience was very similar to that of the Fox researchers re: the interchangeability of roles and problems of the Fox and the researchers.

[98] As the Government of Alberta Department of Energy is not a signatory to the Memorandum of Understanding/Agreement, and the petroleum industry is not considered to be a direct stakeholder, informed consent was not obtained from the Canadian Association of Petroleum Producers.

Manager of Whitefish Lake Logging. Representatives of all stakeholders were in attendance and agreed verbally to take part. Consent was obtained during discussions over dinner and solidified through the course of the meeting. Informed consent letters were signed and returned shortly thereafter.

The second phase of my research concerned working with officials of the Alberta Government regarding the meaning and definition of co-management, cooperative management, joint management, and review of schematic models related to resource management. This was initially facilitated through Aboriginal Affairs in a joint meeting with officials of the Department of Environmental Protection. The format used was a group meeting with discussion and exchange flowing both ways. Once this initial meeting took place, I was then able to work extensively with individuals of both departments as both political and practical requirements had been met. Everyone knew that everyone else was involved and what the terms of that involvement were.

The third phase of my research involved working directly with Tolko Forest Products on: harvesting of forest resources; the role played by the company in Alberta forest management generally; the industry view of cooperative management; and the industry view on First Nations involvement generally, and Whitefish involvement specifically. This information was necessary in order to construct an ethnography of the company that was managing the area with Whitefish Lake First Nation. This phase also included work with the elders of Whitefish Lake regarding their view of forest management, sustainability, and cooperative management and other community involvement activities.

The fourth phase of my research brought all of the stakeholders together on common initiatives, bearing in mind that each stakeholder has its own political and economic agendas, and individuals representing stakeholders have their own personal agendas. I am not to be excluded from this process, as I had my agenda as well - doing something useful and completing my degree.

I consider that the process of obtaining consent was itself the commencement of my fieldwork: for example, as I was attending meetings prior to receiving consent from all stakeholders, I was observing the stakeholder interactions as the stakeholders were observing me. Throughout the remaining phases of my research, I have used various components of rapid appraisal/participatory methodologies, such as focus group work and mapping, in combination with participant observation and interviewing. The way I have conducted this research closely parallels components of the Fox action research, as well as the Fox reality that research methods are deliberately chosen to adapt to the circumstance. The details of methods used are outlined as follows and were used interchangeably with all stakeholders. They are broken down for the sake of explanation.

Participant Observation: The Cybernetic Loop

As a process of communication as well as control, my framework of participant observation did not include specific community events such as feasts and Christmas gatherings, for two reasons: I was not residing in Whitefish Lake; and my attendance not only was unnecessary, but could have a negative impact upon the research process if other stakeholders developed the perception that I was "working" for the First Nation. My observations did include the critical venues of: cooperative management steering committee meetings with the Alberta Government; band council meetings; band council meetings with Tolko industries; working group meetings on cooperative management; elders meetings regarding traditional land use and forest resources; transects of winter use areas; and other formal meeting settings with groups and individual officials from Aboriginal Affairs and Environmental Protection. My observations also included participation in field site activities related to forestry and secondary forest usage: for example, while accompanying the elders on a tour of the Tolko OSB mill located in nearby High Prairie, I was able to observe the intensity of the interactions between the resource-users and the resource-extractors. Other activities were undertaken as they arose, dictated by the circumstance at the time. Participant observation was not limited to the community of Whitefish Lake, as a substantial amount of work took place in the corporate environment of Edmonton and, to a lesser extent, the communities of High Level and Slave Lake, Alberta. As noted by Vidich and the Fox researchers the degree to which participation and observation are required is best made on the basis of the data to be collected - and not on the basis of standard field practice.

The quality and validity of the data to be collected was at the forefront of my attention to the research, as both the greatest strength and greatest weakness in my research is a decade of practical experience[99]. Because of my experience, I always tried to be vigilant to ensure that my observations were those of a researcher whereby the unusual or significant was recognized, rather than accepted as commonplace. My position in the "network" of government/First Nation/industry/university relations also affected my observations:

> What an observer will see will depend largely on his particular position in a network of relationships...The task assumes the necessity of less concern with methodological refinements for handling data after they are collected and more concern with establishing canons of validity and the need, too, for a better balance between the standardization of field techniques and the establishment of standards for the evaluation of field data according to their source and the collector (Vidich 1969:78-79).

All of the information that I obtained as an observer was conditioned by the context in which I worked. For example, by virtue of the fact that access to this research problem was granted in the first instance by the Chief Executive Officer of Alberta Aboriginal Affairs and a First Nation Chief, and I was working with those in the stakeholder "community" who understood the need for participation in cooperative management and the creation of meaningful employment and decision-making for First Nations people, I was assigned a position in the network. This also has included my assignment to a political faction at a senior level by some government officials, as I was already identified as part of the cooperative management "group" by virtue of both my research problem and my access to senior officials on an on-going basis. I made my role clear to all stakeholders at the onset of the research and acknowledged my vantage point held because of my position as an independent researcher[100]. I was also required at one point to acknowledge my vantage point owing to my independent access to officials representing all stakeholders. Rosalie Wax was working on these issues before I was old enough to play in the backyard alone. Despite the age difference, I have found her insights to be particularly helpful as I am involved in community research in the role of a researcher:

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[99] Similar experiences are noted in Messerschmidt *Anthropologists at Home in North America* (1981). Of particular note is the article by Wolcott entitled "Home and away: personal contrasts in ethnographic style".

> ...involvement, membership, or role playing in an alien community is that the value of a role, for the participant observer or social scientist, does not depend on its traditional genuineness...but on the vantage point that it gives to the observer or participant who wishes to observe, communicate with and understand the people about whom he wishes to learn, in a manner and fashion to which they do not object, it is a good role (Wax 1961:55).

Rapid Appraisal/Participatory Methods[101]

In 1990, Terry Grandstaff noted that in development work the world is seen as "composed of a highly interactive set of variables, rapidly changing and subject to a high degree of uncertainty" (Grandstaff et al 1990:7). A high degree of communication is required, consisting of constant feedback between the practitioner and rural peoples. In the case of my research, the interviewing of key and individual respondents was used in combination with direct observation, field diagrams, with transects, and with group interviews. All stakeholders were treated as equal partners in the research process. This is particularly important in the case of social forestry in general and its extension beyond the academic world as "Foresters, long accustomed to their roles as custodians and production managers of forest reserves, have suddenly been cast in new and unfamiliar roles as rural development workers and change agents" (Grandstaff et al 1990:26). Forestry management in Alberta and elsewhere in the world has shifted, whereby development is no longer feasible "from the top down" and problem identification and resolution must involve the community as an equal partner, rather than solely relying on the forester or researcher. Data collection in this context has become process oriented. This is exemplified in my own research as I was a "facilitator of community interpretation", a concept noted by Roddan (1994). Tools appropriate to this processual view were, therefore, used in combination with traditional anthropological methods.

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[100] The value of being perceived as independent cannot be overstated. The fact I did not work for any of the stakeholders greatly facilitated the ease of communication between myself and the stakeholders. This also facilitated the bringing of all perspectives together into one management framework. To my surprise, at no time was it stated pejoratively that I was undertaking this research out of my own self interest.

[101] These include materials from both rapid rural appraisal and participatory rapid assessment. The author recognizes the basic difference between these two approaches as one of ownership of information and the nature of information extraction. Robert Chambers (1994) states that in RRA information is more elicited and extracted by outsiders as part of a data gathering process. In PRA it is more generated, analyzed, owned and shared by local people as part of empowerment. I feel that Chambers may be noting form more than substance in his assessment, as the effective use of both methods depends primarily on the character of the community and the interactions of the researcher(s) with that community.

Working with the community provided significant challenges, as time lines were short and my preconceived notions of this component of my research were massive. My original vision was to do a complete traditional land use study with Whitefish Lake, based substantially on working with the elders of the community, as well as a set of oral histories and curriculum development projects. This was to be accomplished while I was simultaneously undertaking extensive fieldwork with both government and industry. My lofty ambitions were abruptly and substantially reduced to what was feasible, assisted through the participation of the elders who told me what was required from their perspective. I subjected the perspective of the elders to a process of triangulation with both industry and government, as well as with other members of Whitefish Lake First Nation, and I was on my way to developing a reasonable community research component.

Baldwin and Cervinskas, eds. (1991), Cernea (1993), Chambers (1994), Davis Case (1989, 1990), Fisher (1987, 1991a), Freudenberger (1994), Messerschmidt (1993, 1995), Molnar (1989), Mosse (1994),Thomson (1992) and Voss (1989) have provided significant insights on rapid methodologies that, where used appropriately and not as "the right answer" (personal communication with Paula Donnelly-Roark, World Bank, 1996) are invaluable. It is also important to remember that research methods are not recipe books, and the use of methods requires a mix of good judgment, common sense, and creativity. Cooperative management, co-management, joint management - however termed - is a concept that is difficult for many community residents to accept. Many do not feel they have any opportunity to change the current system of government control. Some people also feel that government and industry will not listen to them anyway. It was very important in my research not only to undertake data collection activities that would provide the information I required, but would involve as many members of the community in the process so that cooperative management of forest resources would begin during the research process.

Elders, Hunters and Trappers

There often exists a gap between the activities of First Nation community political leaders and the community elders, usually related to economic development initiatives which involve resource extraction. In some cases, the elders view leaders as moving too fast into economic development and business enterprises and not having enough concern for the environment. Whether true or not, the perception held becomes the reality. In the case of Whitefish Lake, I solicited the advice of the political leadership, Aboriginal Affairs, and the manager of Whitefish Lake Logging to determine the best approach to take. I began community meetings with the elders, and then with the hunters and trappers, not only at the suggestion of Chief and Council of Whitefish Lake, but because my experience suggests that the elders possessed the history of land use and occupancy and have seen many changes over the years. The hunters and trappers of any age have a unique current knowledge of the land and resources, as well as knowledge of the past. These two groups also were able to provide the information necessary to protect and manage those areas of special significance, such as nesting areas and berry-picking patches. These practical opportunities served two purposes: they allowed the elders and hunters/ trappers to be heard and their views known; and the land use data necessary to initiate cooperative management processes were collected.

Small Group Meetings

Small group meetings with elders, hunters and trappers, and interested others, were used to involve the community in forest resource management. An appropriate time and place was arranged for meetings and notice provided ahead of time. Various methods were used to encourage discussions such as maps, short slide shows of other aboriginal joint and co-operative management initiatives, and other activities that fostered two-way communication between myself and the groups. In the case of the Elders Advisory Council, one female elder and one male elder facilitated the first meeting. The meetings were initially called to share a common problem (the sustainable management of resources) and a common purpose (protection of the environment for future generations and securing of long-term employment). We began by discussing the importance of managing resources in current political and economic realities, and participants were provided time to express their views. We then held meetings regarding definitions of co-management, cooperative management, and joint management. At this time, questions of language became important and interviews were transcribed for later translations. People were given opportunities to express their concerns, and it was agreed that field trips would be made to the cut blocks on a rotating basis. The issue of defining co-management was re-visited on a recurring basis as the project progressed. In addition to group meetings, semi-structured interviews were also held with individuals on the issue of definition. Both men and women participated equally[102].

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[102] Further research issues pertain to the use of biography as a method of improving and intensifying understanding of a variety of social and cultural processes. Clifton, ed (1989) notes that "Using biography as a magnifying glass, peering closely at the experiences of particular individuals, we aim at revealing more texture and intricacy than what emerges from other types of anthropological and historical studies, and at generating some new insights" (Ibid:ix).

Mapping

Mapping was central to the research process. Data that were mapped included the: ungulates, migratory birds, berry harvesting, place names, spawning areas, changes in reserve boundaries, traditional territory boundaries, and the boundary with the Gift Lake Metis Settlement. These activities included also the interpretation of a series of aerial photographs spanning 1949-1992. These were excellent demonstrations of forest disturbance owing to industrial activities such as oil and gas and forestry over time. Common landmarks were identified, changes in watersheds noted, and land use areas marked. Maps developed during land claim negotiations were also used to check reserve boundaries and community plans. Where possible, we did not duplicate work that had already been done. Paper maps and diazo prints were used in a variety of scales for the S-9 management area. As the land base is both on and off reserve, the elders[103] worked with: provincial base line maps; provincial ecological zone maps; 1:50,000 scale forest cover maps; 1:15,000 scale maps of the townships covered; 1:50,000 scale resource access maps; provincial forest management area maps; and a variety of maps outlining hard and soft wood proportions, forest/vegetation classification, and land use classification. As we had multiple copies of each, participants were able to draw directly on the maps. All mapping activities were undertaken on the principle that all sustainable forest management must be done in an integrated manner. This means that the animals, forest, watersheds, and all other aspects of ecosystems must be taken into account as changes in one part of the system affect all other parts.

Children and Youth

At the other end of the community spectrum were the schoolchildren and youth, and many concerns were expressed by the elders regarding the future. The elders insisted children become involved in forest management initiatives, as they will be left to manage their lands and traditional territories long after those who negotiated the land claim are gone. I solicited the advice of the elders on the best approach to take with the children in terms of involving them in forest management activities. A number of suggestions arose - the first being that elders really enjoy working directly with children, as it serves to bridge the age gap and leads to greater understanding. As a result, I was requested to go to the school committee and the principal to establish the first link, and then to work with the elders and school to design a process of involvement that would continue once the research was completed. The elders made the point that their working with children provided another benefit: opportunities to further oral traditions and for the children to learn the history of their community from the people who have lived the traditions. This led to the development of creative ideas about forest management and sustainability.

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[103] The mapping work was done only with community Elders, with the assistance at various times of one of the Whitefish Lake Council members. This was the desire of both the Chief and Council, and the researcher. My own field experience has demonstrated that the Elders may be the most appropriate "first contact" on mapping issues, to be expanded at a later date.

The first step toward involving the children and youth was to obtain permission from the local education committee and principal to work with the children in the school. This served two purposes: to make sure the education administration was involved in supporting the children's involvement in the project; and to ensure assistance from the teachers in working with the children. A meeting was planned to explain to parents what the project was about.

To encourage the interest of the children, videos on aboriginal forestry, hunting, and other activities involving land use were shown and discussed. Videos were also shown that demonstrated aboriginal role models. Mapping activities were undertaken, geared to the appropriate age group. This was based on the management process whereby forestry cut block maps are coloured by the foresters to demonstrate the different stages of logging: for example, the areas that have been cut, how long ago cutting occurred, and the areas to be cut next year are all outlined in different colours. The actual forestry map was hung in the band office and then children were actively brought into the process. Younger children were each provided with a 2' x 2' township map or section map to colour any way they wanted to colour it. Each child then signed his or her name to the map they worked on. Each section will be joined to the other with tape in the coming school year, and the entire management area will be hung in the school for the community to see. In addition to involving the children in forest management activities, this process served to facilitate cross-factional communication within the community.

Specific activities were also designed for the youth by the youth: they were obviously not interested in colouring maps and signing their names. They were, however, interested in learning how to read maps and what they mean. It is intended this process will continue in the spring and summer, with field trips to berry-picking areas and nesting areas.

Interview Techniques

Combined with direct observation, the use of semi-structured and unstructured interview methods have provided information regarding the "facts" being observed. I have used a combination of these techniques in many projects and have found often that information is provided via the interview process that is not available through observation. This is particularly critical as much of my work was focused on obtaining perceptions regarding the nature of the forest, the answering of the question "what is a tree" to First Nations people, government officials and foresters, and the interpretation each gives to the concept of cooperative management. It is highly unlikely that accurate, honest and valid statements regarding these issues would have been obtained through observation only. Where possible, interviews have been checked with other interviews through a process of triangulation. The reliability of information and, conversely, the identification of distortions, provided valuable information and insight as to where clarification was required. Where needed and acceptable, the use of a tape recorder was made and notes taken. Where this was not acceptable, I was able to develop mental "triggers" in relying on my memory and in recording of my field notes in a timely manner.

It was my experience that in a formal setting such as steering committee meetings, most individuals I worked with preferred that a tape recorder not be used, but copious notes could be taken[104]. While in semi-structured interview settings, the use of note-taking was acceptable as was the use of my tape recorder. Indeed, the use of the tape recorder contributed to hours of laughter as jokes would be told and played back at a later date, or colleagues (who in other settings are also personal friends) would desperately try not to let the recorder bother them, but when re-played demonstrated rather unusual voice modulations. In all cases, the people I have worked with wanted to ensure that an accurate record was kept - particularly in politically and economically contentious environments.

In research with members of government and industry, as well as with individual community residents, I made use of semi-structured interviews. They proved to be useful for working toward solving management problems and allowed for focused, two-way conversation. I found that individuals more easily discussed sensitive or political issues if they were not in a group and were in a neutral place such as their kitchen, or at a downtown coffee shop. While useful in their place, I did not use structured interviews as they were not appropriate to this research project. First Nations people are "sick to death" of being interviewed, studied, and researched.[105] Further, the use of a standardized interview format is not productive in most cross-cultural research. What makes sense to Cree resource users may not make sense to a government official, and what makes sense to a forester may not make sense to this same official.

Environmental Assessment

I made use of the concept of "environmental assessment" in my work with the elders. This method was used to gather information on real and perceived environmental effects of resource management activities. Discussions took place that gave individuals a chance to voice concerns and put their ideas on sustainable forest management forward. Categories used were developed by the elders and included: wildlife; subsistence and commercial fishing; water; forest; traplines; nesting areas; and traditional and current trails. The elders did not wish to break the categories down any further at this time for reasons of conservation expediency, as sensitive areas required protection immediately, which would then allow some time to worry about issues of biodiversity. In the words of one of the elders, "you can only have biodiversity once you protect the biodiversity". The use of this method has ensured that community issues existing at this time were brought forward and dealt with before they became major problems. Through this process, it was possible to develop a community environment assessment framework that is helpful to Chief and Council in their discussions with government on the implementation of the Memorandum of Understanding. This framework is also proving useful to Tolko Forest Products in revisions to the Forest Management Plan. Using this method involved individuals and groups on an on-going basis, as well as providing systematic and consistent value judgments.

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[104] My note-taking at meetings of the MOU Steering Committee is appreciated by the stakeholders to the point where I have written up meeting minutes. This has served the purposes of the Committee, as well as providing me with a unique insight into decision-making processes.

[105] When I first went into the field in 1984, Albert Elias of Holman, NWT, told me a joke which I have often repeated to get the point across that we must be sensitive in our research: " The social structure of every Inuit household is based on: a husband, wife, two children, a dog team, and an anthropologist. In that order".

Issues of Validity and Reliability

> Michele, there is one thing you have to realize. Everyone involved in this business has an agenda. No one is going to tell the full truth, but will tell varying degrees of half-truths. You must make yourself aware of this and don't ignore its influence in your research. Also remember that people will try to put you in the middle. In any interaction, look at where you stand. It you are standing between two issues or two players, remove yourself. Otherwise, you will become ineffective. In politics, perception is reality (Anonymous, March 1996).

This quote stemmed from a lengthy conversation regarding validity and reliability issues with one of my colleagues in this research process. The conversation was valuable in determining what was valid and what was reliable information. A long term stay in a community does not guarantee valid results. Indeed, as noted by Wax "...the researcher who insists on equating understanding with intense and intimate participation - who believes that he can do field research only if he lives with his hosts...may find himself thrown out on his ear or...unable to carry on his work" (Wax 1961:7).

The accuracy of perception and interpretation does, however, greatly facilitate confidence in the validity of the data collected on the part of the applied anthropologist and, in this case study, on the part of the stakeholders. As applied anthropologists we do not work in worlds where the non-economic value of trees can be quantified reliably [106]. We do not work in worlds where we need to demonstrate that we do, indeed, have contact with human beings. We do, however, work with living human beings who are attempting to maximize their choices in life, sustain the environment, and feed their families. We must, in the words of Wolcott, take care over "the consequence of taking a term over [that was] specified in one domain and reassigning it a more satisfying, intuitive, and global definition in another...Validity serves most often as a gloss for *scientific accuracy* among those who identify closely with science and for *correctness* or *credibility* among those who do not" (Wolcott 1994:346-347).

My own research and past experiences have demonstrated the "validity" of Wolcott's statements. The stakeholders in my research are not concerned whether we can quantify opinion, measure outcomes, or replicate results. They are concerned with whether I have interpreted correctly their view of forest management and whether these interpretations can then be re-constructed as a management model/agreement.

Issues related to data quality control have included reflexive cycles of conceptualization, data collection and analyses, and write-up. For each item, I have considered the conditions and context of data collection and whether it was collected under some negative influence. Where this has occurred, it has been noted. I have compared my observations with earlier fieldnotes[107], and as noted by McCall (1969) and Seltiz et al (1964) I have searched for reactive effects, for ulterior motives, and for idiosyncratic factors - down to analysing an argument between two individuals that took place one day over who would cook lunch, and the hard feelings created when a representative of a forest company did not stay for soup. Wax describes the process as beginning outside the interaction, confronting behaviours the researcher finds bewildering and inexplicable, and searching for emergent patterns in a world of meanings the observer finds difficult to grasp (Wax 1961). Wax's work has been useful to me in avoiding the negative impacts of what Tax termed in his correspondence with Peattie as "taking chances". I have also sought constant feedback with the stakeholders on each step of my research, as to have surprises at the end would not be effective in reaching agreement on a management model.

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[106] For a discussion of this issue, see: Adamowicz, W.L. "Valuation of environmental attitudes". In: *Canadian Journal of Agricultural Economics* 39(4):609-618 and Adamowicz, W.L. et al 1991 *Forestry and the Environment: Economic Perspectives*. CAB International.

Not every individual with whom I wanted to communicate wanted to communicate with me, particularly those who felt forced to cooperate through their senior officials' signing of informed consent letters. My approach to my work with all individuals was direct and open. If, following an explanation of my intent and purpose an individual remained uncooperative, I sought other channels of obtaining information. Depending on the circumstance, I checked again with uncooperative individuals regarding their future participation. In all cases they did eventually agree to take part, although in some cases with great reluctance.

As an applied anthropologist, I am confident in the validity and reliability of my data as an outcome of process. The close of my research was marked with the submission of a draft forest cooperative management structure, based on community data, stakeholder data, and international resource management case studies, to the Steering Committee. The outcome of this developmental process will be determined over time[108].

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[107] A colleague, mentor and friend Dr. Bruce Morrison, provided me with a piece of advice which I shall carry to my anthropological grave - "keep up with your field notes, Michele. Do not fall behind. If you do, you will lose valuable information, insights, and will drive yourself crazy when you go to write this up". This is one of the best pieces of advice I could have been given - this and "stop trying to do so much in one day".

On Participation

A number of benefits have been experienced by community residents through the participatory nature of this approach. Local people were provided with a forum to express their views and be involved in a dialogue regarding management with outsiders. The potential to gain the commitment of local people to implement management activities was increased resulting in an increased contribution to decision-making and action. This has been noted by both Rocheleau (1994) and Thrupp et al (1994) as a benefit accrued in their own research projects. The methodological approach used was also extremely relevant to the practice of applied anthropology as it provided the opportunity for "...the possibility for alternative practice that seeks to promote broader social and ecological options, combining livelihoods and life support in local landscapes that are at once home, habitat, and workplace to those who live there" (Rocheleau 1994:5).

There are, however, problems associated with the use of participatory methods noted in particular by Annorbah-Sarpei (1993), Donnelly-Roark (1996), Lane (1996), Mosse (1994), Voss (1989) and personal communications with: Wendy Wilson Fall, US/AID; Ron Ayling and Vilia Jefromovas, International Development Research Centre (Canada); and Cameron Henry, Senior Policy Advisor, Alberta Aboriginal Affairs, and others who are involved in program delivery and monitoring. Some of the problems are noted as follows. Anthropologists using a framework of

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[108] I have found the Fox and Vicos projects to be useful not only in terms of methodological contribution, but in terms of realizing the feasibility of long-term research projects. Some of my future research considerations include a continuation of the work undertaken with Whitefish Lake First Nation and the Government of Alberta, and the establishment of an on-going research program. This process has begun, as future projects flowing from this dissertation are being discussed with both the First Nation and the Government of Alberta, with the possibility of University of Alberta involvement in projects undertaken by new graduate students.

"participatory action research" are accused by First Nations as going into aboriginal communities with pre-conceived methodologies whereby local people have to "fit in". This causes resentment and frustration at the community level. Another difficulty noted is the fact that the unique social structure of each aboriginal community may not be taken into account with participatory action research, observed both in Canada and noted by Lane (1996) and Athol Chase (personal communication) in Australia, especially when regional and national aboriginal organizations are presumed to "represent the people". A third difficulty lies in the fact that training opportunities provide only short term project-related employment. In Canada, First Nations communities frequently complain that there are no further employment opportunities once the project team "fly in and fly out". Donnelly-Roark (1996) notes that in the desperate drive to reach the "right answer" in development work, consultation is mistaken for true participation - resulting in projects that fail. Voss (1989) notes that issues of knowledge and power are not taken into consideration seriously, as rules and patterns applicable to various aspects of knowledge are highly variable and closely reflect the social structure. I would add this variability applies not only between aboriginal cultures, but within aboriginal cultures[109]. Voss also notes that rapid approaches do not elucidate the ways in which tradition is constantly being reinterpreted on the basis of experimentation. As he states "I am constantly amazed by the number of scientists I have met who assume that tropical agriculture must be simpler, because the societies are technologically less developed" (1989:16). Participatory action research, in particular, risks implying that societies such as Cree communities are easier to understand and that the people in them have simple motivations. Extensive mapping activities, frequently used under the participatory action research framework do, however, tell us "what we want to hear", as we get the messy work of politics, perception, and competing realities out of the way in a framework that non-natives like to see and funding agencies like to fund. Donnelly-Roark notes that:

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[109] Various designations of "Cree" Indians in Canada demonstrate this principle. Many researchers have made the mistake of assuming that structures learned in northern Saskatchewan are applicable to northern Alberta. Such is not the case. Even the dialect spoken is different. The same applies to Western Arctic Inuit and central Arctic Inuit - while geographically both are located "in the north", that is where the similarity ends.

> ...we in the international development community have tended to mainstream the trendy rhetoric of participation, while letting the more difficult reality of participation practice lag far behind. This confusion of a desired result with a facile strategy inevitably leads to the diminishment of participatory development's real potential...it conversely strengthens the perceptions of the donor...that substantive participation practice is actually taking place. But this substitution of rhetoric for reality is now playing out the dangerous shell game that allows us to continue business as usual while widening the gap between rich and poor (1996:1).

It must be noted that it is not only government officials, scientists and other professionals who are guilty of extracting indigenous knowledge from a community under the heading of "participation". The academic community also may be subjected to this criticism, particularly in the area of land-use studies and activities such as the mapping of traditional land use areas. Often the participation of the local community is solicited through "participatory action research" rhetoric; however, what results may be the extraction of the traditional ecological knowledge from the community by the academic, hidden by the creation of false participation strategies such as extensive consultation. This type of exploitation is noted by Donnelly-Roark (1996) as well, in her work with the Africa Technical Department of the World Bank. In her view, the critical determinant is *where the control rests.*[110] Most often, control does not rest with the community.

The potential social consequences of forest management will have to be assessed in the examination of tensions between desires for empowerment and tendencies toward control by government and scientists. Reality rather than participatory rhetoric demands that recognition be given to the following possibility: that a realistic assessment of the traditional ecological knowledge and traditional land use activities held and carried out by the community may demonstrate the desire for a co-operative management agreement that is based more on employment needs than other considerations. The final decisions on implementation will rest with the First Nation and Government of Alberta as they take the opportunity to assert a new agenda for resource management and development. This must be done, however, from realistic political and social perspectives.

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[110] For further discussion, see Oakley and Marsden (1984).

Again, I remind the reader that used appropriately, rapid and participatory appraisal frameworks have much to contribute to applied development efforts. They are not, however, the solution to our methodological ills. We must also be aware of the risk of commodification of method, and the possibility of the use of "hot concepts" to the advantage of their protagonists, rather than to those on whose behalf the concepts are applied.

On Gender and Methods[111]

> The relationship between gender and the suspicion of spying is a complex one. Since males are in most cultures perceived as more political, more linked to the sources of power, and more dangerous than females, they may be more readily taken for spies in situations of war or imperialism. Yet the sexualization of spying is associated with women, and with the potent cultural symbolism of Mata Hari - the snakewoman luring the hapless male into betrayal and doom (Warren 1988:24).

It became obvious to me through both this research process and previous experience, that the gendered position of the female anthropologist has an impact on the research process (Stanley and Wise 1993 and Warren 1988). Ethics and politics come into play, noted by Warren (1988) in "gendered" research, which are important to how we undertake both gender research and - in this specific case - co-operative management research, and the knowledge claims we make based on our research. In the case of the three knowledge bases noted in this research (traditional ecological, scientific, and technocratic) the gender of the researcher is important in understanding the way in which knowledge is distributed and implemented[112]. It is clear, as noted by Warren (1988), that the setting, research methods, disciplinary and personal biography of the fieldworker shape the process and results of fieldwork.

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[111] Further issues of gender and future research considerations are discussed in the Postscript.

I am in agreement with Warren's statement that "gender" is not an object of fieldwork negotiation, but is a part of the structural grounds upon which negotiation takes place (1988:9). Female anthropologists working in development settings dominated by males often have a difficult path to follow[113]. Gender has a tremendous impact on the process of doing fieldwork including: access to field settings; gender and research relations in the field; the place of women in the culture we are working in; and the interrelationship between gender, field relations and issues of epistemology. Gender is a key organizing device in all cultures and, therefore, male and female researchers will always be treated differently by those with whom they work. As a result, they will come to know different aspects of the cultures they investigate. The keeping of detailed fieldnotes has assisted me in my understanding of the gendered nature of interactions with respondents as my research has demonstrated that power and knowledge play pivotal roles in social life (Gallin and Ferguson 1991; and Murray and Dosman 1994).

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[112] I was told that the fact that I was a woman provided me with the freedom necessary to move within and among the stakeholder groups, taking into account the following. Firstly, members of the groups were confident in my past experience and my awareness that "perception is reality" in politics and, therefore, would be unlikely to make horrendous mistakes nor threaten positions. Secondly, stakeholders appeared to be more comfortable talking about cooperative management issues with a woman, as they were more confident that "off the record" conversations would be kept confidential. Thirdly, as I was not an advocate for Whitefish Lake First Nation but a member of the academic community, government and industry were able to participate more fully (Anonymous, March 1996).

[113] Margaret Mead argued (1986) there were two types of women anthropologists: the one with deeply feminine interests and abilities who interested themselves with the affairs of women and children, and the masculinely oriented ones bored with women and children, who work alone and attempt to use male informants and study male worlds. For my part, I am relieved that I do not live nor work in such a dichotomized existence. While my research and fieldwork takes me into the realm of male-dominated politics, never am I disinterested in the roles of women in community life, and never is it assumed that these roles do not have an impact on male-dominated politics. This is an issue for future research consideration.

What is also critical to my research is the interaction process whereby respondents assign the fieldworker to what they see as her proper place in the social order. Warren notes a number of instances where this assignment has caused difficulties for fieldworkers such as that experienced by Ruth Landes:

> ...Landes was labeled a prostitute during her research because of inadvertent violations of gender proprieties. On one occasion she checked into a hotel that, unknown to her, was frequented by prostitutes, while on another she wore a pair of shoes worn locally only by streetwalkers (Golde 1986:300).

During my research, on more than one occasion the statement was made to me that "if you were not a woman doing this research, it would never have gone as far as it did. You have nothing to lose as you are not seen as threatening" (Anonymous, April 1996). While some may have taken this statement - made by a male respondent - as an insult, I did not as I have considered the nature of gendered relationships in cross-cultural political development settings. I was acceptable to all the stakeholders in part because of my role as a female researcher and, in part, because it became known that I have a decade of field experience gained in similar settings. I was not treated in a sexist manner[114] nor was I treated with disrespect. I was often treated with more consideration and respect by members of the stakeholder groups than they afforded each other. Whether I was married also was important to the research process: women in the community were comfortable with my status as a married woman, and the men respected that position. My husband - who is fluent in Cree - also travelled into Whitefish Lake with me on two separate occasions, which helped me establish contact with the male hunters and trappers[115]. His travelling with me also put the worries of one of the male members of the Elders Advisory Committee, who was concerned with my travelling alone, to rest. When I returned to the community on numerous occasions - unaccompanied - it was assumed my husband was not far away.

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[114] Warren (1988) discusses this under the heading of "the sexual politics of fieldwork". She notes that at issue is the tradeoff between accepting sexism on the one hand and the acquisition of knowledge in the interest of furthering careers on the other. Like Warren, I have not found the "shrinking violet" role in fieldwork particularly problematic, as we wear different masks in the field as we require them and, while it has its place, being quiet and listening is often more effective than bluster.

This is not to say that difficulties did not exist; however, being female did not result in any lack of credibility. The fact of my being a woman has not hindered my fieldwork in this research process, although there have been occasions when it has over the past decade. This is another issue for future research.

The following chapter will address resource management models in forestry and other sectors throughout the world, chosen on the basis of considerations of location, structure, management content, and their perceived usefulness in contributing to my understanding of the potential for co-operative management between Whitefish Lake and the Province of Alberta[116].

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[115] Prior to the commence of my first meeting with the Elders Advisory Council, my husband and I were talking with the male hunters about the maps I was laying out on the tables. As I was explaining the nature of the data to be collected, the hunters were directing their responses to my questions to my husband, rather than to me. While I was interested in the interaction occurring in front of me, my husband made it clear to the men that he was not doing the research and this was not his research project. His protests were, essentially, ignored. This pattern of communication did not change until my husband physically left the meeting room for the duration of the meeting. It is interesting to note that when there was no other male present, the hunters resumed their conversation with me and directed their responses to me for the remainder of the meeting day and, indeed, throughout the course of the research. This situation does not provide an example of sexism. It does provide an example of how gendered roles come into play: in Woodland Cree society, women do not become involved in mapping and land use planning activities.

[116] It is beyond the scope of this dissertation to include every model that has applicability to my case study. For example, it has been pointed out to me that there are models from India and New Zealand that would be relevant, in addition to those focussing specifically on issues of gender. These will be dealt with in future research considerations.

6. Local-Global Articulations

> A forest's desired qualities, the defining virtues of the "sustainable forest" vary tremendously among people. Definitions depend upon what different people want, over what area and length of time they assess gains and losses, by what means they prefer to control the balance, and by and for whom they wish to exercise these means. Sustainable forest has no definition until the what-where-when-how-who, the value perspective, is specified. As few agree on these matters, the sustainable forest is controversial for good reason: any one definition represents particular values at other's expense.
>
> Jeff Romm "Sustainable forestry, an adaptive social process". In: *Defining Sustainable Forestry*, 1993:280.

> Some of modern economics seems to be based on the corset-maker's old advice: "If madam is entirely comfortable in it, then madam most certainly needs a smaller size".
>
> Amartya Sen *Resources, Values and Development.* 1984:1.

> Instead of regarding the world as easy to disaggregate into separate variables and linear cause-effect relationships, 'post-Newtonian" analysts describe it as dynamic and complex, sometimes rapidly changing and often chaotic. From this perspective, there is not single reality, but multiple, contested realities, each with potentially conflicting social and normative interests and diverse and discontinuous configurations of knowledge. Within these multiple realities, knowledge is embedded in social processes that imply aspects of power, authority and legitimation; and they are just as likely to reflect and contribute to the conflict between social groups as they are to lead to the establishment of common perceptions and priorities. Such an understanding demands that we look closely at the issue of whose interpretations or models...prevail...and under what conditions.
>
> Ian Scoones and John Thompson, *Beyond Farmer First - Rural People's Knowledge, Agricultural Research and Extension Practice: Towards a Theoretical Framework.* 1992.

Introduction

It is very easy for development anthropologists and other specialists to develop a myopic view of development, based on where they are situated and the context within which they work. Africanists, for example, may see the world only in terms of structural adjustment implementation. Poverty reports may be written by donor agencies without giving consideration to the concept of "poverty" by the drafter of the reports. Those who work exclusively in the Amazonian rain forest may see the world only in terms of forest degradation. Others may be constrained by policy reflecting a desire not to offend the borrower, noted by Horowitz (1996)[117]. As a development anthropologist it is, however, necessary for one to emerge from a narrow vision of "development", take into account what has been accomplished in other parts of Canada and the world, and recognize the significant contribution to be made in terms of resource management-related knowledge and the application of other practices to our own research[118]. The term "global-local articulations" becomes a reality through an understanding of resource management initiatives undertaken elsewhere. This understanding can then be used in the development of resource management models that, while uniquely Canadian, take into account the experiences of others - both positive and negative - facing similar issues.

There are many resource management issues throughout the world, in a variety of sectors, in a range of geographic locations. While the number that are relevant to my research is substantial, it is not possible to review all of them in this document[119]. This chapter does not provide extensive detail and analyses of "case studies" as it is not intended as a "how-to-do-it" manual for implementing community forestry. As noted by Gilmour and Fisher (1991), given the number of unknowns surrounding almost every aspect of community forestry and the uncertainty of achieving anything, it is unrealistic to expect to develop a blueprint for activities. Instead, this chapter provides an overview of issues and guiding principles. This approach has proved to be the most effective and useful in my development of a foundation for cooperative forest resource management between Whitefish Lake and the Province of Alberta.

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[117] Horowitz, in discussing his work with the World Bank, expresses the view that the presence of anthropologists and other social scientists is a necessary but hardly a sufficient condition to assure poverty alleviation, equity, sustainability and social justice. Horowitz was asked to review a paper on Mauritania, a country which he knows well. He gave the following as an example of where development can go awry: "Mauritania is a multiply stratified country, by color, ethnicity, class, and condition of servitude...West Africa Mauritania is unique in the degree to which slavery continues to characterize the active status of large numbers of its citizens. Those who are statutorily slaves are called "*harratin*", sometimes glossed as "black Moors", Arabic-speaking descendants of those kidnaped or captured in battle...Although Mauritania formally outlawed slavery several times, most recently in the 1980s, slaves continue to be bought and sold, to be subject to obscene punishments, and to perform uncompensated labor for their Beydan owners. The draft document that I was asked to review made neither direct nor indirect mention of slavery. When I pointed that out, and suggested that a poverty assessment that failed to confront a central feature of poverty is severely flawed, I was told that such mention would be considered offensive by the Beydan elite that controls the Nouakchott regime, and the report would be rejected" (1996:5).

[118] Cernea (1993), for example, notes the process of international application is critical in the identification of the root causes of deforestation in specific social contexts and in suggesting strategies of dealing with problems that threaten the global environment. While on a global scale the primary cause of wood degradation in Asia, West Africa and Latin America is consumption for wood heating and cooking (ibid:4), Canadian degradation resulting from industrial consumption is just as important an issue and is noted by the International Development Research Centre (1993a, 1993b, 1993c) documents flowing from the 1992 Rio Conference and Agenda 21.

This chapter will address: Canadian model forest resource management and the International Model Forest program; forest resource management practices and issues in Nepal and Zimbabwe; resource management models in other sectors such as conservation areas, mining, and parks[120]; and a summary of issues. Through this examination, what we can do effectively is take best practices and worst scenarios, draw analogies and comparisons, and apply what we have learned to our own practice of development anthropology.

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[119] A substantial number of co-management/cooperative/joint management arrangements were reviewed including: Adams (1993); Alberta Forestry, Lands and Wildlife (1990, 1991); Albrecht (1991); Amend (1989); Anderson (1993); Andresen (1993); Anonymous (n/d); Anonymous (1989); Anonymous (1992); Axon (1994); Bailey (1994); Bendickson (1991); Berkes (1980, 1981, 1984, 1987, 1989); Binder and Hanbidge (1993); Bonar (1991); Bonin (1995); Bowes and Krutilla (1989); Bratton (1994); Busiahn (1989); Caulfield (1988); Cizek (1990); Clancy (1990); Cohen (1989); Connell (1985); Dale (1989); Department of Indian and Northern Affairs (1994); Doubleday (1989, 1993, 1994); East (1986); Feit (1984, 1986, 1988); Fortier and Pinkerton (1993); Freeman (1989, 1993); Freeman and Carbyn, eds (1984, 1988); Gambell (1993); Gosse (1995); Government of Saskatchewan (1995); Green, ed (1986); Grima et al (1989); Gunn (1988); Hobart (1981); Indian and Northern Affairs Canada (1985, 1992, 1993a, 1993b, 1993c, 1993d); Johnson and Johnson (1994); Johnson (1994); Kassi (1994); Kearney (1989); Keith and Neufeld (1988); Langdon (1989); Lewis (1993); Lloyd (1986); Macleod (1989); Morrell (1989); Murtha (1994); Osharenko (1988a, 1988b); Paisley (n.d.); Pinkerton (1993); Pinkerton et al (1993); Richard and Pike (1993); Richardson and Green (1989); Riewe and Gamble (1988); Robinson Consulting and Associates (1995) Rock (1992); Standing Committee on Aboriginal Affairs and Northern Development (1994); Therrien (1988); Usher (1986); Wacquan (1986); Watson (1989); and Wheeler (1988).

[120] An expanded discussion of those models included in this chapter, in addition to summaries of other resource management arrangements, is contained in Appendix K.

Model Forest Program

In December of 1990 the federal "Canada's Green Plan For a Healthy Environment" action plan was released emphasizing, among other things, the importance of Canada's forests and a concern for forest management. Effective strategies were seen to be required to achieve sustainable management of forest resources, conserve natural systems, and minimize environmental degradation. The Model Forest Program[121] was announced in June 1992, based on principles of sustainability and networking. Each Model Forest (see Fig. 1) follows a different path in decision-making structures that, it is hoped, will lead to sustainable forest management, each based on a variety of indicators. A common feature of each site is the building of working partnerships among individuals and organizations who have an interest in sustainable forest management. This network may include: industry, government, First Nations, municipalities, environmentalists, agriculturalists, and other third party interests.

There are nine Canadian model forest sites ranging from different types of boreal forest to the old growth stands of Clayquot Sound. Management issues focus on social, ecological, and economic impacts on sustainable development. There are four international participants (see Fig. 1 and Fig. 2) (and an intent on the part of the Model Forest Program to add others): Gassinski (Russia); Calakmul, Mariposa Monarca and Chihuahua (Mexico); Betong (Malaysia); and Applegate, Cispus, and Hayfork (United States).[122]

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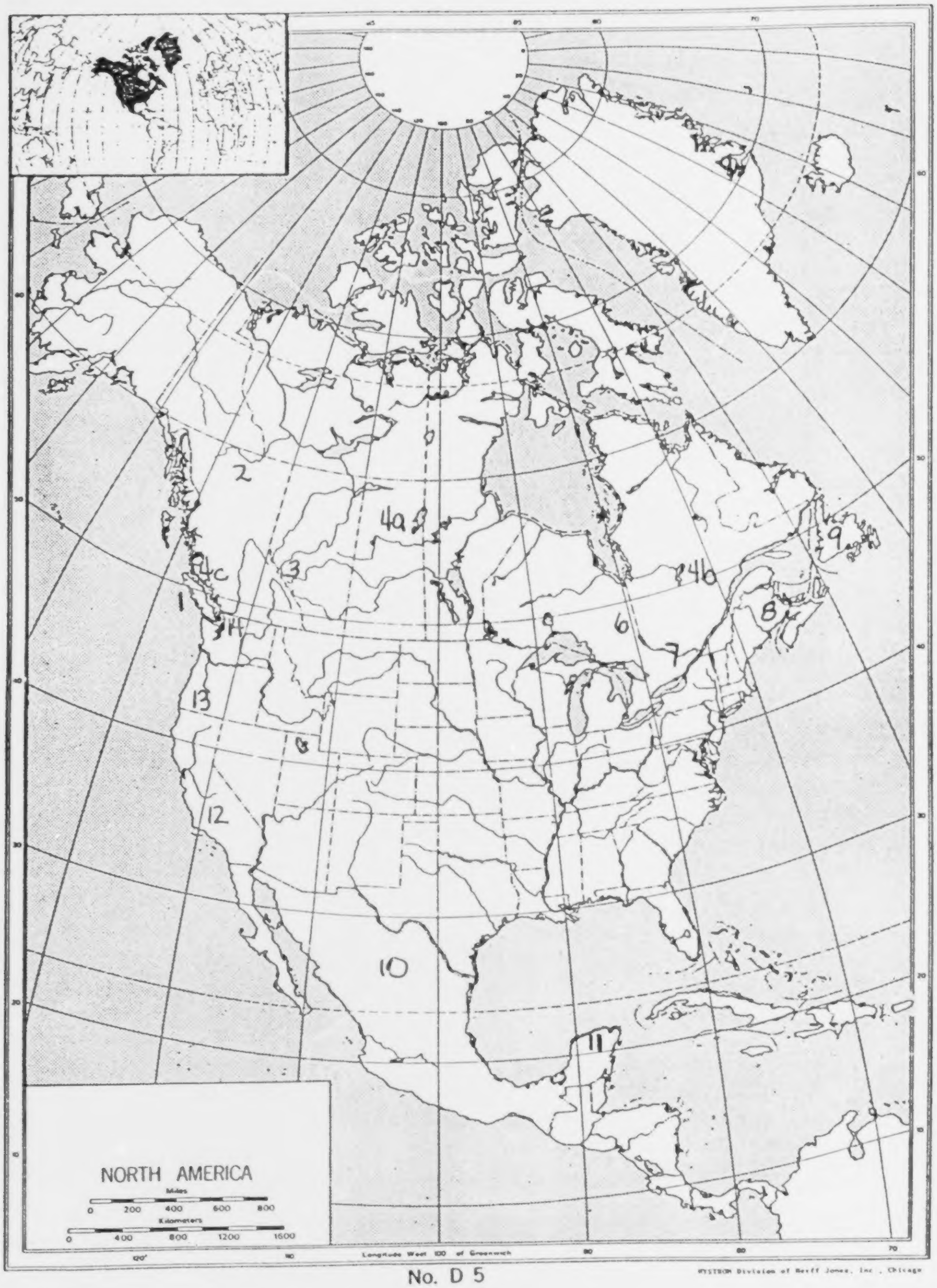
[121] See: Department of the Environment *Canada's Green Plan for a Healthy Environment*(1990); Beckley (1994); Booth (1994); Brand et al (1993, 1994); Bunnell (1994); Duinker (1994); Kessler (1994); Kill and Newstead (1994); Kulshrestha (1994); Natural Resources Canada et al (1991, 1992a, 1992b, 1994a, 1994b, 1994c, 1995, 1996); Runyon (1994); Titus (1994); van Kooten (1994); and Walker (1994).

[122] Selected Model Forests are discussed in Appendix K.


NORTH AMERICA
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9
4b
6
7
8

Fig. 1
Location of North American Model Forests and Sipanok, Barriere Lake, and Xaxl̓ip Sites

Legend

Fig. 1

North American Model Forests

1. Long Beach
2. McGregor
3. Foothills
4. Prince Albert
5. Manitoba
6. Lake Abitibi
7. Eastern Ontario
8. Fundy
9. Western Newfoundland
10. Chichuhua
11. Calakmul
12. Applegate
13. Cispus
14. Hayfork

Other Sites

A. Sipanok
B. Barriere Lake
C. Xax'lip

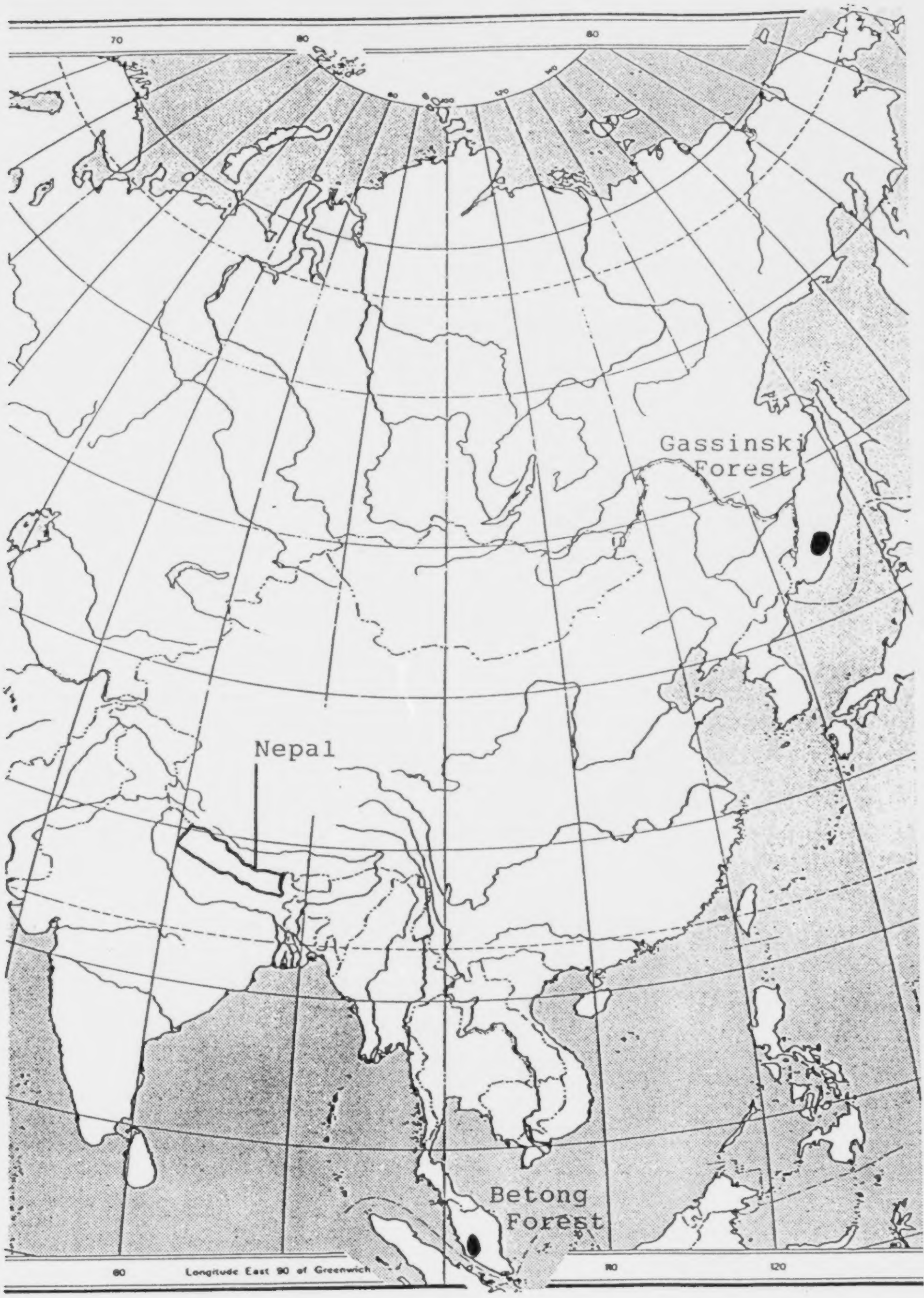
70
80
80
Gassinski
Forest
Nepal
Betong
Forest
80
Longitude East 90 of Greenwich
110
120

Fig.2

Other Selected Canadian Initiatives

There are a variety of resource management agreements and processes in various stages of implementation throughout Canada and it is not possible to review them all to any depth in this dissertation. There are, however, three forest management agreements implemented in Saskatchewan, Quebec and British Columbia that are noteworthy.

Sipanok Area Management and Development Agreement

The 1992 Sipanok Agreement covering 3250 sq. km. (see Fig. 1) has built a cooperative atmosphere between Province of Saskatchewan, the First Nations of Shoal Lake and Red Earth, and other resource management users. The Agreement: establishes principles and an administrative system for the cooperative management of forests, fish, furbearers, and other wildlife resources; emphasizes the enhancement of First Nations' employment in resource management and economic development initiatives; and ensures the development of methods for First Nations' participation in resource inventories and the allocation of harvests. Implementation occurs through a Co-management Council. The chairmanship alternates between the Province of Saskatchewan and a representative of either the Red Earth or Shoal Lake First Nations. Membership includes representation from: each First Nation; the Province of Saskatchewan; the Federation of Saskatchewan Indian Nations; the two rural municipalities; the general public; and the Government of Canada. The Sipanok Area Management and Development Agreement Economic Development Board, established through the Agreement with members from each First Nation and the province, recommends and carries out the programs approved under sub-agreements.

This Agreement is unique in that it explicitly recognizes, in a significant way, the role the First Nations have in the sustainable management and use of renewable resources on Crown lands.

The Algonquins of Barriere Lake - Quebec Partnership

This 1991 Trilateral Agreement[123] between the Algonquins of Barriere Lake, the Government of Quebec, and the Government of Canada (see Fig. 1) is based on the accommodation of commercial forest management with the protection of wildlife habitat and the minor timber needs of the Algonquin people. The Agreement[124] covers an area of 10,000 sq. km. and addresses: the preparation of a draft integrated renewable resources management plan and implementation measures, based on the integration of traditional environmental knowledge with scientific technical skills; and the identification and provision of protection to sensitive zones in order to minimize the impact of forestry activities on traditional pursuits of Barriere Lake people. Each of the parties to the Agreement appointed a Special Representative mandated to represent them and supervise all work undertaken as a result of the Agreement process. This included the supervision of the task force struck to identify measures to harmonize the conduct of forestry activities with the traditional activities of the Algonquins of Barriere Lake, as well as the sensitive zones which required more stringent protection.

Xax'lip First Nation Joint Stewardship Agreement

In British Columbia (see Fig. 1), the management term "joint stewardship" is used to describe resource management cooperation and encompasses other terms like co-management and cooperative management. Interim principles include: the recognition of the unique legal interest of First Nations in the land; the essential role of First Nations in developing and implementing policy; the recognition of traditional and scientific aspects of resource management; respect for third party interests; the right of the government to exercise its powers under statute; and the provision for First Nations' participation in resource management. The Agreement applies to any disposition (including licenses and permits) and use of land, water and resources within the Xax'lip's traditional territory[125]. Provisions are also made for recognition of decision-making processes of the First Nation in "structuring the participatory processes for resource decision-making" (*Joint Stewardship Agreement* 1992:3), including time lines on reaching consensus with government.

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[123] This Agreement was the culmination of many years of acrimony and debate with governments, with hydroelectric developers, and with loggers. Over time, these industrial developments had impacted severely on wildlife habitat and the pursuit of subsistence livelihoods. Today, the capacity of the environment to produce the wildlife and fish on which the First Nation depends is seriously threatened, and recreational hunting pressures continue to grow.

[124] For a copy of the Trilateral Agreement see Appendix L.

A Joint Management Advisory Committee with equal First Nation/provincial membership was established to make recommendations to the First Nation and the Province of British Columbia. Meetings take place in First Nation traditional territory.[126] Education initiatives were also developed to increase the stakeholders' mutual understanding of their respective resource decision-making processes and, one assumes, their priorities. This Agreement also includes a Memorandum of Understanding to foster employment and training opportunities, as well as the development of cooperative resource management initiatives such as a Resource Management Plan. This Plan is designed to: collate existing inventories and resource plans for all the provincial ministries; review resource management and use of the traditional territory by the First Nation; and integrate traditional First Nation resource data.

Forest Resource Management Perspectives: Nepal and Zimbabwe

Nepal

The major issues currently faced in Nepal (see Fig. 2) pertain to the meeting of basic needs with respect to timber, fuelwood, fodder, and other minor forest products, taking into account socio-economic, and environmental contributions from the forestry sector to peoples lives (Fisher 1990a, 1990b; Food and Agriculture Organization 1993; Gilmour and Fisher 1991; Gilmour 1992; Gilmour et al 1992; and Messerschmidt 1985, 1994). In practice, however, meeting basic needs while ensuring sustainability is problematic. Past and recent efforts at forest management have been largely technical in nature and have not addressed socio-economic objectives as expressed by communities themselves[127]. In addition to the problems faced at the community level owing to poverty, lack of infrastructure and the caste system, meeting basic needs is further complicated by competing foreign aid[128] projects that set project goals and pace and are not appropriate to the concerns of the local people[129]. What also must be assessed is the validity of existing indigenous forest practices. Gilmour and Fisher (1991) note that interaction between foresters and villagers should be productive through the development of management plans that ensure the right of the villagers to use the forest, but specify ways in which the forest can be managed to ensure long term sustainability.

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[125] See Appendix M for a copy of the *Joint Stewardship Agreement between The Xax'lip First Nation and Her Majesty the Queen in Right of the Province of British Columbia.*

[126] On the surface, this does not seem important; however, for many years First Nations representatives attending meetings with government were required to travel extensively to provincial capitals or to Ottawa. With the extensive negotiations processes taking place throughout the country on land claims, this requirement has gradually shifted. Government representatives now frequently travel to the location of the relevant First Nation.

The impact of government must also be considered. It is unrealistic to assume that community-based implementation will occur just because there has been a higher level policy shift. Substantial institutional changes are required on the part of both community and forestry department to meet new objectives. In this perspective, the forest becomes the means by which development is carried out rather than the end result of the development process. Gilmour and Fisher (1991) point out that in most cases, this will involve changing perceptions and methodologies within government and bureaucracies, as well as within local communities themselves. There are, however, two inherent difficulties with this aspect of change: bureaucratic culture and power[130] and institutional incompatibility, noted by Fisher (1990a, 1990b) and Gilmour and Fisher (1991). In the first case, there is a tendency on the part of government bureaucrats - who also happen to be foresters - to assume that all relevant knowledge about forests and ways to organize the management of forests rests with foresters. In the second case, the organization which has been given the responsibility for devolving control of forests to local communities also represents the interests of those who have most to gain by maintaining control of forests themselves - the Forest Department. Both of these factors lead to behavioural patterns where individuals avoid making decisions in case they offend superiors or disrupt the role of patronage. These actions result in an environment whereby decision-making often appears to be irrational and illogical in terms of the expressed aims of forest policy[131]. There is also the variable of technocratic knowledge to consider, and the impacts of that knowledge on policy implementation:

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[127] It has been noted that perhaps the most significant examples of this are from Thailand, where the Royal Projects moved most, if not all, of the people out of the forests thereby creating a resettlement problem on top of a resource problem (personal communication, Eloise Murray, May 1996).

[128] For further discussion on foreign aid and the impact of political values of donor countries (i.e. United States, China, Russia and India) on Nepal, see Mihaly (1965).

[129] An example of this is provided by Gilmour (1992) and pertains to the perceived indirect benefits of afforestation projects. In one of the villages of the Kabhre Palanchok District, it was found that trees had to be cut down to build the nursery developers said was required, as there were no treeless areas in the vicinity upon which to construct a nursery. When questioned as to where the seedlings would be planted to battle deforestation, the villagers responded that naturally occurring small trees would have to be cut down to make space for the seedlings. Eventually, the village leader came to the conclusion that the village did not have a shortage of trees; however, "they did have water shortages and they thought that if they requested a nursery, a water supply also would be forthcoming" (Ibid:84).

> ...one major point which is central...is the importance of personal relationships in official decisions. The reason for this is the extent to which powerful people can intervene directly in the lives of their clients and provide them with favours. The client then owes his patron reciprocal obligations. This again leads to all manner of hidden agendas being pursued through complex sets of obligations and counter obligations [which] can often give rise to a rather cumbersome and

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[130] For further discussion on political behaviour in Nepal see: Bista (1991); Caplan (1975); and Kondos (1987).

[131] Gilmour and Fisher (1991) note that Max Weber's (1964:339) analysis of the specifically rational nature of bureaucratic administration is not valid in the case of Nepal forest management policy implementation. I daresay it is not valid in most cases of resource management - including resource management in the Province of Alberta.

> circuitous process of obtaining relevant information and making decisions (Gilmour and Fisher 1991:188-189).

Zimbabwe

The guiding principle in the attempted integration of national concerns with local needs and perspectives in Zimbabwe (see Fig. 3) is the need to enhance woodland conservation while, at the same time, ensuring its productive and sustainable use (McNamara 1993). The development of more realistic woodland management regimes reflecting the need for local control is complicated by *de jure* and *de facto* control, management of woodland areas, and concepts of tenurial niche[132]. It is noted (McNamara 1993; Nhira and Fortmann, 1993; Scoones and Matose 1993) that since land and tree tenure are not always synonymous in the Zimbabwe context, conflict[133] over use rights may emerge as different people claim rights over trees and their products, as well as over the land[134]. The case of communal woodland in communal areas represents a case of common property management, not of simple open access whereby no exclusion rules operate and access to resources is open to anyone.

Despite difficulties in implementation, the case for common property woodlands management is developing and is gaining strength based on: the recognition of common objectives for management that can cut through local conflict

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[132] Nhira and Fortmann (1993) note six such niches in Zimbabwe: forest land controlled by the state; trees controlled by District Councils on communal land; indigenous woodland in communal and resettlement areas; trees planted by groups and institutions; trees planted and protected by individuals on individually controlled land; and trees on commercial farms. Most villages occupy more than one niche.

[133] This is an extremely complex area which is beyond the scope of this dissertation. For further discussion see: Bruce (1990); Cusworth and Walker (1988); Moyo (1986, 1992); Nhira and Fortmann (1993); Scoones and Matose (1993); World Bank (1990), and others.

[134] Communal ownership today means the state legally owns the land and manages it, for example, through line agencies - each of which is responsible for its own sector. A Ministry, such as local government, coordinates the activities of the line agencies (Metcalfe 1993). This VIDCO (Village Development Committees) system is, however, an overlay of the traditional governance system (personal communication, Eloise Murray, May 1996).

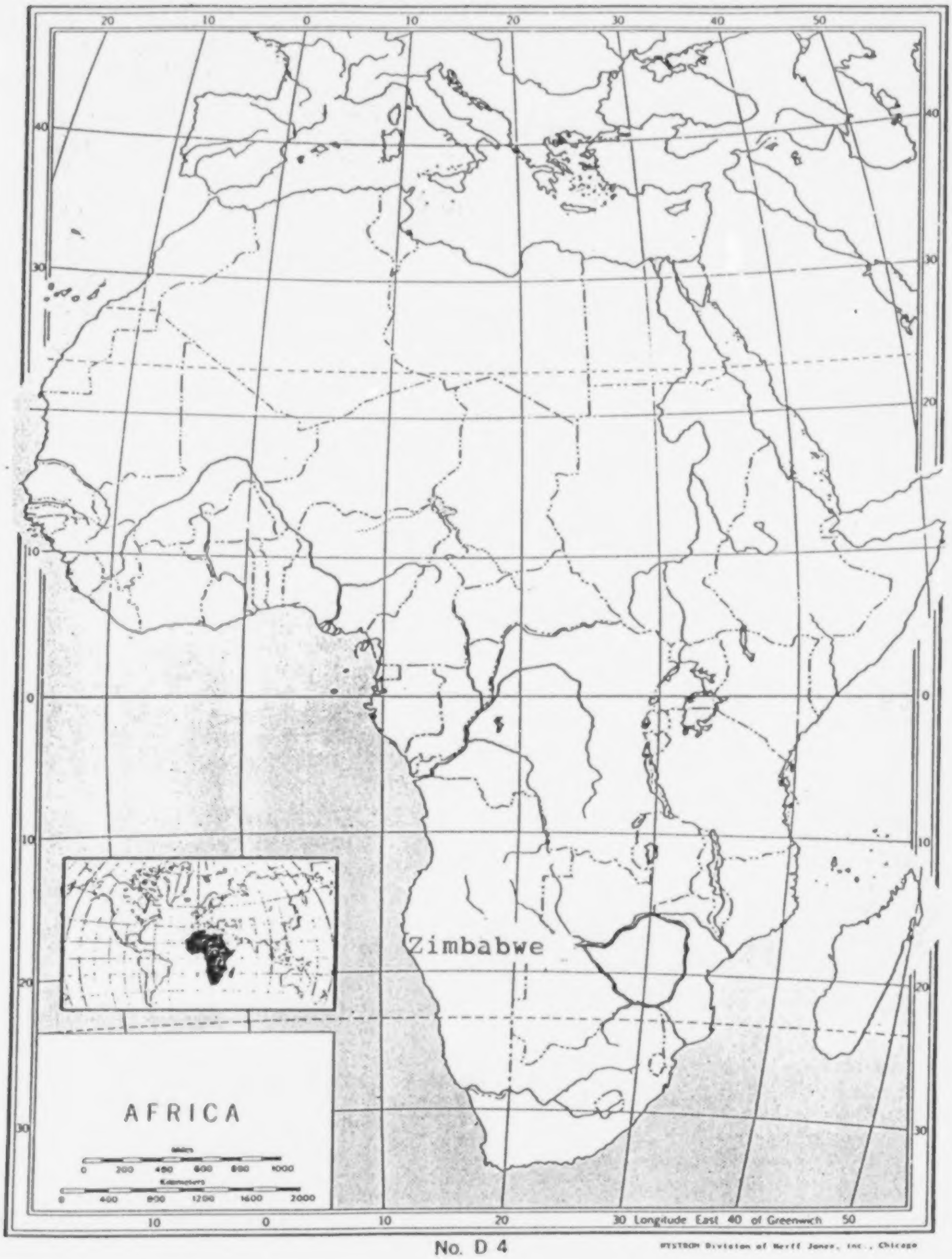
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Fig. 3

and differentiation; the introduction and acceptance of resource management rules that are based on local knowledge and practice; the strengthening and empowerment of new and traditional local institutions; the need for local communities to gain direct benefits from investment in resource management; the need for a broad and flexible regulatory framework; and the negotiation of co-management agreements with external authorities where different responsibilities and commitments are mutually agreed upon. Murphree (1991), cited in Scoones and Matose, notes:

> The evidence is that communities can become effective institutions for sustainable resource management, but only if they are granted genuine proprietorship, i.e. the right to use resources, determine the mode of usage, benefit fully from their use, determine the distribution of such benefits and determine rules of access. Any policy which excludes these components will frustrate the goal of making communities effective institutions for resource management (Scoones and Matose 1993:175).

It must also be briefly noted, however, that the issue of community management of woodland in resettlement areas and state forest issues is also critical to forest management in Zimbabwe as "Many of the dilemmas currently faced are intimately bound up in the wider issues of land access and control". Moyo (1986, 1992) goes on to state that the inherited patterns of land allocation in Zimbabwe impose enormous pressures on resource use in the low potential communal areas. This has spill-over effects on adjacent lands made up of resettlement areas, state forests, parks, and commercial farms. This is important as land use planning in resettlement areas does not include woodland management or use, as it is based on cropping and livestock packages for settlers. The emphasis has been on clearing land for agriculture; as such, use of the extensive woodland resources within resettlement areas has not been widely explored. Forestry "only enters the plan in the form of a standardized village woodlot of gum trees" (Scoones and Matose 1993:166).

Nhira and Fortmann (1993) note three special problems faced by resettlement schemes with respect to woodland management: they have to live with the results of management decisions of the commercial farmers who previously owned the land. Secondly, they are constrained by the rules of the resettlement authority (e.g.

removing all trees from arable fields). Third, they must struggle to establish and protect their rights to the trees on the land against the claims of the residents of the adjacent communal areas - essentially, this amounts to wood poaching.[135] Further, resettlement communities suffer similar weaknesses in institutional structures as described for communal areas. It is noted by Scoones and Matose (1993), that there are no existing structures of authority with which any new institutions can articulate, complicated by the fact that settlers come from a wide variety of backgrounds, as settlement initially focused on the provision of land for those with limited assets, and are inexperienced in leadership. The result has been that:

> ...settler communities have found it difficult to exclude those wanting to make use of the resettlement area woodland resources for wood collection, grazing and so on (usually neighboring communal area people). Similarly, it has been difficult to sanction settlement members for collaborating with outsiders in the extraction of wood... The result has been the effective breakdown of exclusion rules and the evolution of a practically open access situation, where resettlement areas are open to anyone (Ibid: 166).

It is suggested that these areas would benefit from more emphasis on institutional development, rather than service provision[136].

Nhira and Fortmann (1993) are careful to point out that there cannot be a single blanket forestry policy implemented in Zimbabwe and rules for forest use should be evolved and enforced locally. Further, the task of the government should be to provide technical assistance and guidance to ensure that management regimes developed will actually lead to sustainability as "(t)he power of the state should be put behind locally generated regimes (Ibid:153).

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[135] Nhira and Fortmann note that the wood poachers interviewed reported that they could not request access to the woodlands as they were not gathering from anybody's fields, nor did they know whom to ask for permission. They asserted that they had used the woodlands when the farms were still private property and they claimed that the area rightfully belonged to them. Some resettlement scheme residents said that they were reluctant to stop the poaching since they relied on the boreholes in the village of the poachers for their water supplies. Thus far, resettlement authorities have been unable to stop the poaching..Any controls that operate are said to be adhered to by resettlement scheme residents only (1993:149).

[136] For an extensive discussion of tenure and resettlement issues see: Bradley and McNamara (eds); Nhira and Fortmann (1993); Moyo (1986, 1992); and Scoones and Matose (1993).

Resource Management Models in Non-Forest Sectors

Latin America Conservation Areas

Poole's (1989) work is based on ten Latin American case studies located at five sites (see Fig. 4) from which he synthesized the major findings. A convergence of conservationists and indigenous peoples in the protection and management of fragile and threatened ecosystems was demonstrated, based on a convergence of interests[137]. The traditional paradigm whereby indigenous peoples were allowed to continue to occupy and use the resources of protected areas[138] - as long as the resources were used sustainably - was effective until the needs of the indigenous peoples and conservationists collided[139]. Human activity was excluded or accepted only under severely limited conditions; it therefore became necessary to reconcile the needs of both indigenous peoples and conservationists. Flexible and dynamic planning and management methods were required that balanced ecological factors with economic use in a pragmatic manner, taking into account activities being carried out in adjacent areas. The UNESCO-MAB Biosphere Program evolved a planning framework capable of accommodating both protected areas and those with compatible forms of resource use, based on a partnership between the indigenous users and the conservationists implemented through the management of buffer zones.

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[137] For further readings on Latin American case studies and the biosphere concept see: Batisse (1986); Bernhardson (1986); Bodley, ed (1988); Burger (1987); Clad (1985); Davis (1988); Glick and Betancourt (1983); Houseal et al (1985); Jungius (1976); Ledec and Goodland (1988); Thibodeau and Field, eds (1984); and Western (1984).

[138] A protected area, referred to as a conservation unit, refers to habitats which have been legally set aside for the protection of their biological diversity, including: national parks; wildlife reserves; ecological stations (Poole 1989).

[139] This "collision" occurs when major deforestation activities or firearm hunting for commerce is carried out by indigenous peoples. These activities are not considered, by many environmental groups, to be compatible with wildlands protection (Ibid).

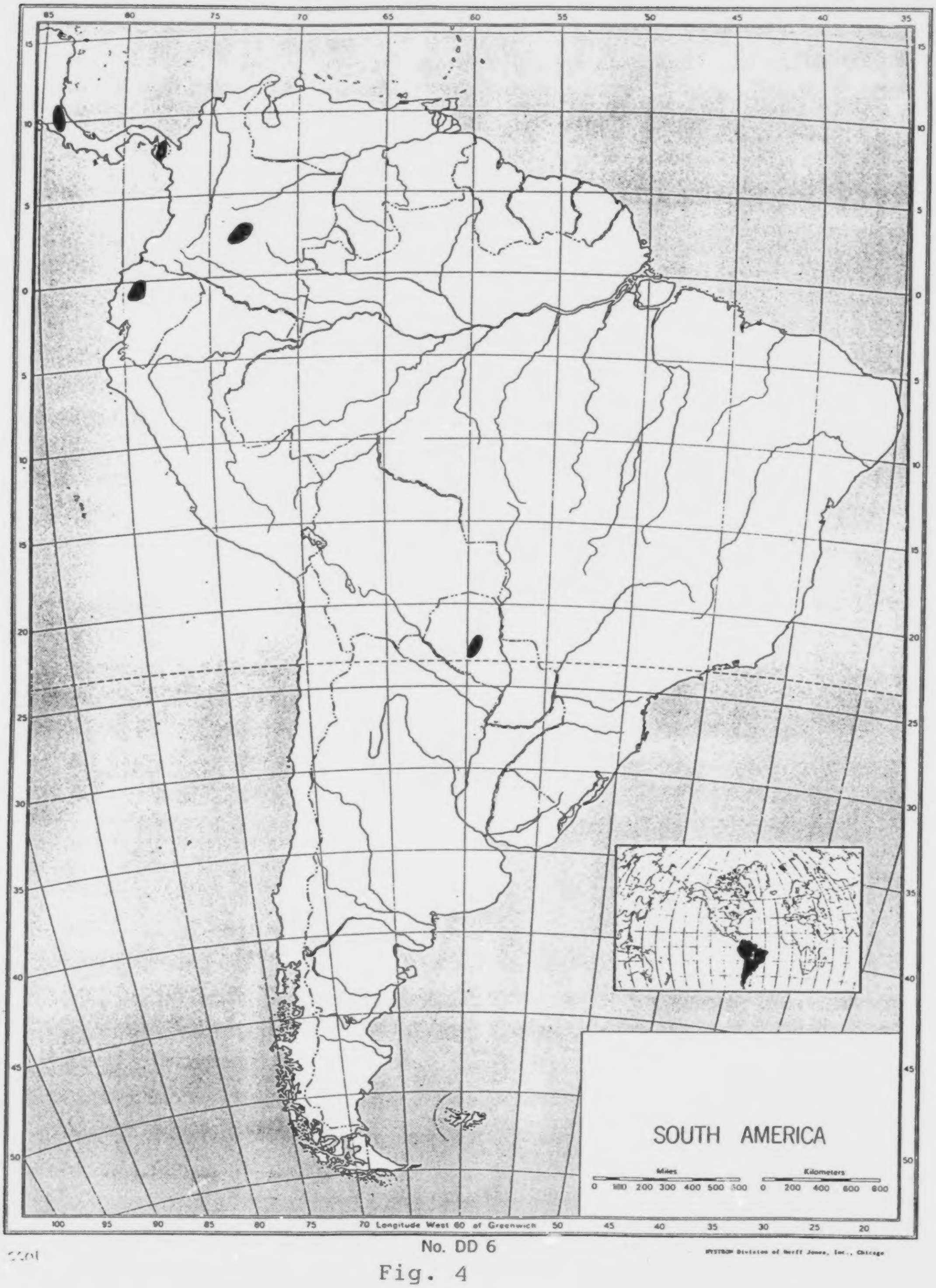
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Fig. 4

Mineral Development Agreements: The Northern Territory and Queensland [140]

O'Faircheallaigh (1995a, 1995b), in his discussions regarding exploration agreements and mining agreements, notes that mining Exploration and License Agreements between Aboriginals and Mining Companies in the Northern Territory and Queensland (see Fig. 5) have been negotiated to: ensure that traditional land owners gain some benefit from mineral exploration activity on their land; minimize adverse effects from exploration activity; and provide as much certainty as possible regarding the development of any commercial mineral deposits which are discovered, including benefits[141]. Parameters may include: the protection of the environment and significant historic and spiritual sites; provision for a "fly-in fly-out" (1995a:4) mode of development as opposed to the development of a conventional township and associated facilities[142]; the establishment of liaison committees to maintain communication between the indigenous land owners and the exploration company[143]; the monitoring of environmental, cultural and social impacts of development by both parties; financial provisions for annual rental payments and negotiated royalties; and employment and training commitments.

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[140] Legislation and regulation surrounding land ownership and use in the Northern Territory and Queensland is voluminous and is outside of the scope of this thesis. For further discussion and information, see: Altman (1983, 1994, 1995); Altman, Bek and Roach (1995); Chase (1996); Lane (1996); McKenna (1995); Neal (1996); O'Faircheallaigh (1988); Sanders, ed (1994); Sanders (1995); Smith (1996); Stephenson and Ratnapala (1993); and Sullivan (1995).

[141] For further discussion see: Altman (1983, 1994, 1995); Connell and Howitt, eds (1991); Gray (1980); Holden and O'Faircheallaigh (1991, 1995); Howitt (1991); O'Faircheallaigh (1988); Stock and Lane (1994); and Sullivan (1995).

[142] A distinction must be made between the use of this term within the framework of mining development and that of the use of participatory action research methods which are termed "fly in and fly out". The meaning in the latter case pertains to researchers who rush into a community, create expectations, and then just as rapidly leave the community to go on to the next project. It flows from the experiences of communities in the Canadian Arctic: the communities are, for the most part, accessible only by air; hence, the term "fly in and fly out".

[143] The Coordinating Committees set up under some recent agreements, and especially the agreement for Cape Flattery, do not just maintain liaison. They are, in effect, *co-management* bodies in relation to certain specified aspects (e.g. cultural, historical, environmental) of mining activity (personal communication, Ciaran O'Faircheallaigh, May 1996).

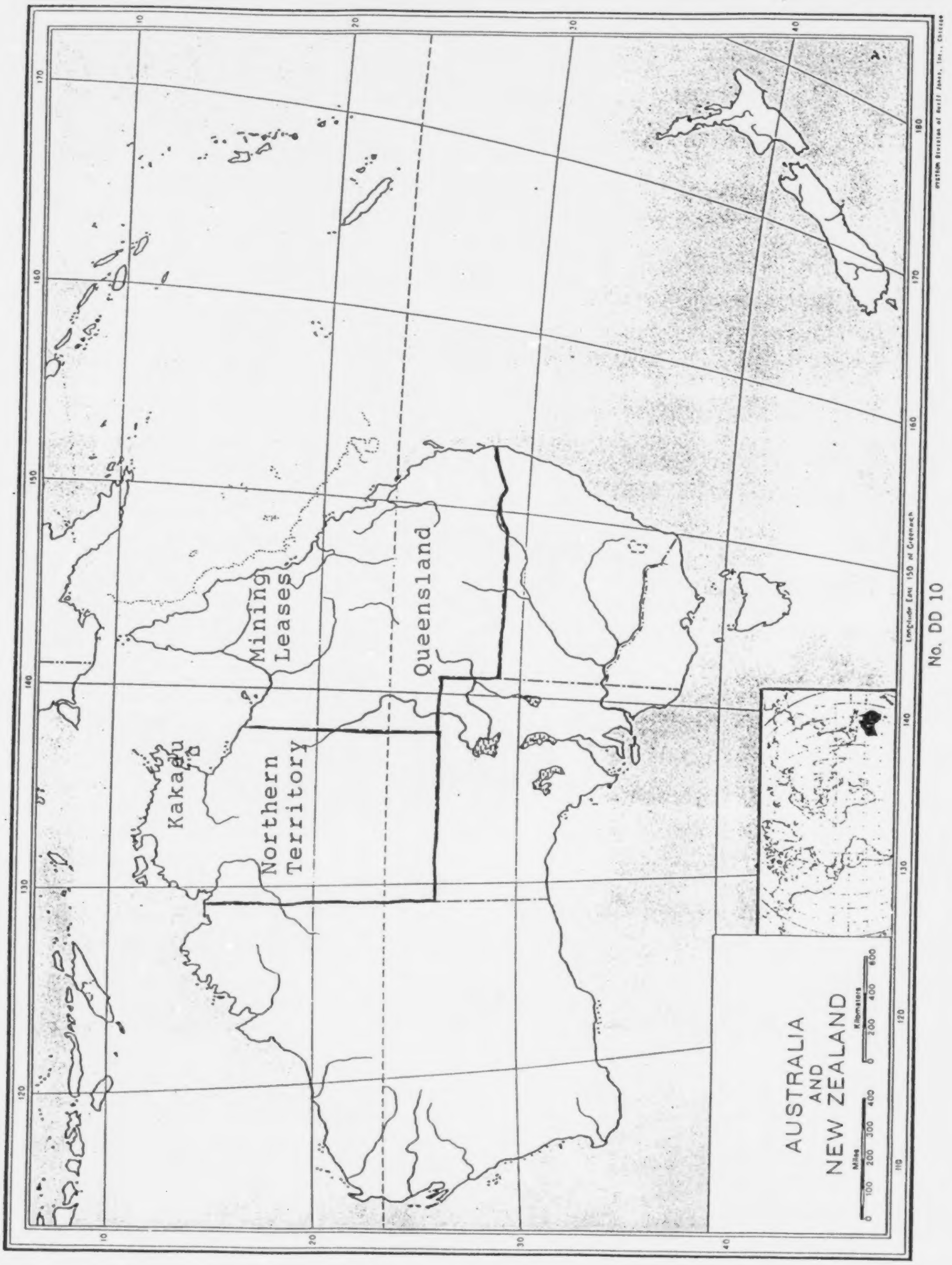
Kakadu
Northern Territory
Mining Leases
Queensland
AUSTRALIA AND NEW ZEALAND
Miles
Kilometers
Longitude East 150 of Greenwich
No. DD 10

Fig. 5

There is a marked distinction, noted by O'Faircheallaigh (1995a, 1995b), between the agreements[144] negotiated between Aboriginal people and mining companies that require developers to obtain Aboriginal consent, and those which do not require this consent. Agreements tend to incorporate substantial benefits - particularly related to royalties and other economic benefits - where consent is required. Control over the environment and heritage issues are also dealt with more favorably. O'Faircheallaigh (1995a) notes three criteria which can usefully be employed to evaluate agreements: the extent to which an agreement reflects an effective mobilization of Aboriginal bargaining power, thereby allowing for the possibility that good agreements may be negotiated even in the absence of significant bargaining power; judging the extent to which an agreement meets community aspirations - taking into account the wishes of traditional land owners; and the extent to which agreements serve to establish precedents influencing the broader negotiating environment and, therefore, the capacity of other indigenous people subsequently to achieve their objectives.

Kakadu Park Management

The Kakadu National Park located in the Northern Territory of Australia (see Fig. 5) was formed amidst intense emotion as a result of many competing interests in the park's lands and resources. Noted by the Australian Nature Conservation Agency (1991); Fox et al (1977); Hill and Press (1994); Knapman et al (1991); Skeat (1986); and Weaver (1991), these competing interests included: mining and conservation; mining and aboriginal interests; pastoral activities and conservationists; tourism and conservation; conservation and aboriginal interests; and aboriginal interests and tourism. The establishment of co-management regimes has occurred in an environment of extreme and sustained political sensitivity.

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[144] The agreements analyzed include the following: Mt. Todd Agreement concluded between the Jawoyn Association, the Northern Territory Government, and Zapopan NL; the McArthur River Agreement between the local Aboriginal groups, the Commonwealth government, and the Gurdanji-Bingningba Aboriginal Corporation; the Cape Flattery-Hope Vale Agreement concluded between the Cape Flattery Silica Mines (a fully-owned subsidiary of Mitsubishi Corporation) and the Hope Vale Community Council; the Mapoon-Skardon River Agreement between Venture Exploration NL and Marpuna; and the Placer Pacific-Kalkadoon Tribal Council Agreement.

A Board of Management operates the co-management system in Kakadu National Park, composed of: ten Aboriginals selected by the traditional owners; the director of Parks and Wildlife; the regional Australian National Parks and Wildlife Service (ANPWS) executive; an ecologist; and a tourism expert. Aboriginal representation reflects the geographic spread. Formal and informal liaison arrangements[145] include: local meetings to discuss specific issues; employment of aboriginal cultural advisors to serve as liaison between the ANPWS and landowners; and the employment of youth in park management. The responsibilities of the Board include: management plan preparation; decision-making consistent with the management plan; the monitoring of the park; and giving advice to the Minister on all aspects of the future development of the park. Areas that are co-managed include: cultural resources, such as oral cultural heritage, historic sites, rock art and archaeology sites, and sacred sites; habitat including studies on soil, water, and fire ecology; feral and introduced animals; the native fauna and flora; and the management of weeds and introduced plants. Key management objectives include: establishing a plan of management in which Aboriginal people play a major role[146]; providing special protection to sites significant to Aboriginal people; rehabilitating areas damaged by feral and introduced animals and plants, and other recent human impacts; developing an inventory of all relevant resources in the park; cooperating with neighbors in complementary management programs to protect park resources; stimulating interest in nature conservation and Aboriginal culture by the development and implementation of communication programs; and protecting the park resources from the undesirable consequences of fire, erosion, environmental change, pollution, and other activities of people.

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[145] There are a number of associations of traditional owners noted by the Australian Nature Conservation Agency (1991) including: the Northern Land Council representing the Kakadu and Jabiluka Land Trusts; the Gagudju Association of traditional owners; the Djabulukgu Association representing traditional owners of the Jabiluka Land Trust area; the Jawoyn Association established to represent the interests of the Jawoyn community who are regarded in Aboriginal tradition as the traditional owners of the bulk of the southern area of the park; a consultative committee of traditional owners representing communities throughout the park; cultural advisors, who are senior traditional owners permanently employed on the park staff; and Aboriginal park staff. Other consultation arrangements are carried out on specific issues as they arise.

[146] While Aboriginal people in various locations throughout the world may "play a major role" through management structures contained in agreements, the question always remains: "by whose rules?" (personal communication, Eloise Murray, May 1996).

The Australian Nature Conservation Agency (1991), Hill and Press (1994), Hallam (1975) and Lewis (1991a, 1991b) note that the greatest challenge for the future of the park is to address adequately and reconcile the sometimes conflicting demands of tourists, Aboriginal culture, public servants' work practices, and traditional conservation. The process of co-management needs, therefore, to be clearly defined and while the expectations of each stakeholder will not be clearly identical, each must appreciate and respect the viewpoint of the other.

Synopsis of Issues

It is evident that there is a vast literature pertaining to co-management, cooperative management, joint management and other management systems in both Canada and throughout the world. Issues noted[147] include: subsistence harvesting; the effectiveness of management institutions; power and knowledge; the use of indigenous knowledge in management strategies; conservation, environmental planning, and protection; dispute resolution; competing interests between and within groups; competing and divergent value systems; organizational structures; commercialization; devolution; legislative authorities; self-management versus state-management; sustainable development; wildlife control and use; the gap between traditional knowledge and western science; and land-use planning.

Many of these issues are pertinent to the development of cooperative forest management implementation planning between Whitefish Lake and the Province of Alberta. These issues are discussed in the following chapter.

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[147] There are a number of land claims agreements completed in Canada that contain extensive provision for the management and regulation of a number of these issues. For further reference see Appendix N (Gwich'in Tribal Council Renewable Resources Board); Appendix O (Gwich'in tribal Council Forest Resources Management); Appendix P (Porcupine Caribou Management Board); Appendix Q (Yukon Final Agreement Special Management Areas); and Appendix V (Yukon Final Agreement Renewable Resource Councils).

7. Structural Re-Connections

> ...there's a large mustard-mine near here. And the moral of that is - "The more there is of mine, the less there is of yours".'
>
> Lewis Carroll *Alice's Adventures in Wonderland*, 1962.

> "Would you tell me, please, which way I ought to go from Here?" "That depends a good deal on where you want to get to," said the cat. Alice went through the looking glass and found a world where nothing was quite what it seemed, and ways of dealing with problems no longer worked. To succeed, she had to deal with things as they were, not as they used to be; to keep an open mind and evolve startling new solutions; to expect nothing but the unexpected.
>
> Lewis Carroll *Through the Looking Glass*. 1962.

> ...the collective action to protect forests (by refraining to take needed products from them) requires an agreement that the exercise is worthwhile. If the benefits from this action are not acceptable, then some people are likely to break ranks. The existence of regulatory use suggests a reasonable level of consensus.
>
> R.J. Fisher *Studying Indigenous Forest Management Systems in Nepal: Toward a More Systematic Approach* 1991a:13.

Introduction

It has been noted in the previous chapter that the literature on cooperative management, co-management, and joint management structures is substantial. Noted by Fisher (1991b), however, the literature to date generally has been limited in discussing the processual aspects of forest management systems. Few case studies, where they exist at all, describe decision-making, dispute resolution, the allocation of use-rights, or provide details of the context within which particular systems have developed. Complicating analyses of this material is the lack of consistency between management structures and regimes. Each system is unique owing to culture, location, and issue. As a result, it is not possible to construct typologies[148] that reflect clearly any sort of coherence between systems. Any attempts to do so, in other than a very cursory manner, are essentially meaningless as the links between indicators are speculative at best.

The use of models, applied on a case by case basis, is more useful as all systems tend to have common features, even if they cannot easily be classified into distinct types. Each system can be approached as a separate problem, informed by previous understandings. Using Nepal as an example, Fisher (1991a) notes that there are huge gaps in information regarding management structures, decision-making, dispute resolution, goals of management, and the ecology of the forests being managed. It is, therefore, not possible to establish comprehensive typologies but, rather, we can describe what Fisher refers to as a "menu of possible practices" based on tentative and restricted generalizations. Fisher also warns against generalizing forest management practice based on forest ecology as there is no direct connection between the two:

> ...there is no particular reason, to anyone but a hardened environmental determinist, why specific environmental conditions, or even specific agroecosystems, should determine the types of social arrangements which should be used to manage them (Ibid:25).

Not all of the models reviewed in Chapter 6 reflect only structure and meet only academic terms of adequacy. Many are reflective of common sense practices in the management of natural resources. They represent a "down to earth" marriage of human nature and structure. While this review proves useful, there are a number of "down to earth" components to these models that should not be overlooked and, indeed, are signposts to successful resource co-management. These components and signposts will be examined in this chapter.

The first section of this chapter provides a synopsis of resource management processes developed from the materials reviewed. Common issues, perspectives and management requirements are outlined including stakeholders, verification, land and tenure, management structures, and dispute resolution. These have been taken into consideration in the development of the Whitefish Lake - Government of Alberta Cooperative Management Implementation Plan discussed in Chapter Eight . The use of terms such as co-management, cooperative management, and joint management are clarified in the latter section of this chapter, based on this synopsis and my own research. A definition of Whitefish Lake - Alberta cooperative management is provided, and the model developed as a result of this research is introduced. At the conclusion of this chapter, I discuss briefly the relevance of issues, problems, and components noted in the chapter to public policy and future theoretical development. This is not intended to be this project's primary contribution to theory; it is intended to provide some indication as to the direction I expect my future to take.

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[148] The definition of "typology" used follows Fisher's analysis (1991b) of individual systems to be placed in approximate separate categories, based on distinguishing features.

Issues and Problems

The shift of management structure from the centre to the periphery does not necessarily guarantee that poverty will be alleviated or that resources will be managed in a more sustainable or equitable manner. As many researchers working in different geographic areas and cultures have noted, the assumption that poor rural people simply require management authority in order to proceed down the road to development is erroneous. The meeting of basic needs through resource management initiatives is not just a matter of providing some limited degree of management authority and, in some cases, financial aid. There are other considerations in resource management that impact on the success or failure of management regimes, such as: forced modernization leading to inter-generational conflicts[149]; the availability of trained personnel at the local level; environmentally hazardous indigenous, industrial and government management practices; tenure and common property disagreements between governments and resource users; perceived or real compromise of land-use rights; a lack of tools and technology; a continuation of "top-down" planning on the parts of government and industry; competing industrial and aboriginal interests; and misperceptions on the part of non-Aboriginal people regarding Aboriginal desires for industrial development[150].

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[149] During a land-use planning meeting held in an aboriginal community, one of the elders made the comment to me that "everything is happening too fast - the politicians are moving too fast, and companies are coming in too fast. We have no control over our land anymore". The political leadership, while sympathetic, had to move ahead in order to take advantage of economic opportunities. A compromise was sought between the perspective of the elders and the realities of economic participation in the wage economy, implemented through the creation of management

The political realities associated with power and authority also impact greatly on resource management processes - including the roles played by government. Noted previously by Gilmour and Fisher (1991), the changing structures from centralized planning and management to decentralized cooperative management require changing perceptions and methodologies within government and bureaucracies, as well as within local communities. The problems inherent in bureaucratic power and culture, as well as institutional incompatibility, however, lead to problems in implementing effective renewable resource management as often those with technocratic training doubt the management capability and capacity of indigenous resource users. This case must be extended to industry, as the same problem exists within industry stakeholders: the tendency to assume that all relevant knowledge about forests and ways to organize the management of forests rests with the foresters. It must also be noted, however, that First Nations have similar biases inherent in their view of management. Often Aboriginal leaders will assume they have a greater or more valid knowledge of natural resources than do non-Aboriginal stakeholders by virtue of traditional land use and occupancy. As a result, an unintended perception - that protectionism is being promoted rather than sustainable

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structures that involved the elders, as well as resource management pilot projects managed by the elders.

[150] It is noted by Hill and Press (1994) that while conservation groups implacably opposed all mining activity in the Kakadu Park region, the Aboriginal people did not. While they were pleased to see mining and exploration generally prohibited within the park, the Aboriginals were conscious of the very substantial financial benefits that could accrue to them if mining proceeded.

renewable resource use - may be created by Aboriginal stakeholders. Further, Aboriginal communities have frequently cited infringements on treaty rights and the inherent right as reasons for becoming involved in cooperative management of resources, thereby emphasizing political rhetoric rather than acknowledging current realities of political process. Rigid adherence to either view - forester or aboriginal - may lead to the failure of cooperative management.

There are other problems involved in the use of rhetoric that are not based on the relationship with government and industry, but are based on miscommunications and historical antagonisms between different groups of resource users. This not only extends cross-culturally, but extends across communities as well[151]. This problem may be exacerbated through inter-generational conflict between aboriginal elders and other members of aboriginal communities, including political leaderships. Often, the elders are unaware of sustainable resource management activities, including regeneration, and fail to take note of the long-term outcomes of an activity. As a result, the efforts of the political leadership in terms of cooperative management and resource extraction, for both maintenance of biodiversity and long term economic development, may be undermined. Further, many times the elderly do not recognize the creation of what they view as artificial boundaries between reserve land, settlement area, or Crown land as their traditional land use areas extend well-beyond the lines drawn by government on the map. Further, their cultural world view does not provide for this context. As a result, they often do not support the inter-community rivalries that may occur over land use and resource extraction that are so much a part of western culture and are becoming increasingly a part of Aboriginal culture[152].

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[151] For example, not only will problems occur between Indian reserve communities and Metis settlements, but between reserve communities as well.

[152] It has been noted in a number of land claim processes that overlap agreements for use of land and resources are required between aboriginal resource users. Cases include agreements between the communities of Mayo and Nacho Nyak Dun (both Northern Tutchone communities); the Vuntut Gwich'in (Yukon Territory) and the Tetlit Gwich'in (Northwest Territories) and others. A similar circumstance may be noted between the Cree of Whitefish Lake and the Metis of Gift Lake.

All of these circumstances lead to difficulties in the development and implementation of relevant cooperative management models.

Resource Management Agreements

Components generally include: the area and resources to be managed; financing of participation and implementation; enforcement; monitoring and evaluation; board and committee structures, including roles and responsibilities; training and education; management planning for special areas; permitting and licensing; and specific management issues such as buffer zones. Implementation planning includes activities, projects, including timing, planning assumptions and funding. The following provides further issues that must be considered, based on: the analyses of research material noted in previous chapters; fieldwork conducted specifically for this research process; and my own experience.

Stakeholders

The views of community leaders often may not represent the views held by community members. At times, leaderships are influenced by outside consultants, creating resentment and misrepresentation both within and between communities, and between communities and industry/government. Further, while Aboriginal resource users may wish to protect various areas from industrial development owing to traditional activities, other Aboriginal residents may also wish to take part in economic development activities based on resource extraction. Government also may experience similar difficulties owing to the immense size of most government bureaucracies, organizational structures, cross-departmental responsibilities, and inter-department responsibilities. This has led to breakdowns in co-management discussions between local resource users, government and industry as representatives lose the confidence of the people they represent and contradictory messages are sent to stakeholders.

Rather than take hard and fast positions on issues when attempting to reach an agreement on resource management, it is necessary to seek areas of common agreement between Aboriginal stakeholders and other stakeholders. On the surface, this would not appear to be difficult. It is a commonly held conviction that all stakeholders trying to reach agreement on, for example, forestry management, want to ensure that forestry is done sustainably, that wildlife habitat is protected, that trappers do not lose their livelihoods, that the environment is protected, and that the resource remains for the use and enjoyment of future generations. This conviction may not, in fact, provide a basis for common interest at all as these aspects of cooperative management may represent the "myth". As noted previously, sustainability is the "motherhood and apple pie of modern conservation..." (Noss 1993:17-18). In fact, the motives of the stakeholders may have little in common with the principles of the myth[153]. The reality is that many are at the discussion table to see how a profit margin can be increased, to maintain a hold on political power, or because their political leaders have mandated their presence. On the other hand money, title, land and licenses are not the only issues involved in the cooperative management of natural resources, and a variety of non-market values, including spiritual ones, may need to be given attention.

Successful cooperative management structures can be developed and implemented only if the government, industry and aboriginal stakeholders try to reduce the temptation to bring their various legislative, financial, and political power bases and agendas to the table. The reality of the resource management process is such that all stakeholders are usually unaware of the actual extent of power held by the other; consequently, this factor and its impact on reaching an agreement is consistently underestimated by aboriginal, government and industry stakeholders. A significant aspect of cooperative management discussions lies in each stakeholder explaining to the other the nature and source of power and authority. Once these explanations are generally accepted and factored into the discussions, it is then possible to work within accepted structures rather than attempt to use the cooperative management process for political gain. Further, each of the stakeholders must attempt to reduce any direct or indirect messages that undermine principles of equality while recognizing the reality that those who are participating at the table do not have equal power legislatively or, in many cases, politically.

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[153] This is not the case between Whitefish Lake and the Province of Alberta, evident through the development of the Implementation Plan, discussed in Chapter 8.

Verification

It is necessary to go back to the people of the community for verification of agreement and implementation processes[154], as much as it is necessary for government officials to go back to politicians and industry officials to return to their corporate executive. Verification does not have to slow the process down if it is built into the timetable for agreement completion. It is also useful to locate at least one-half of the resource management discussions in aboriginal communities. Often this is the only opportunity that aboriginal community residents have to participate in discussions or to see the representatives of the other parties to the agreement. This also provides the other stakeholders with opportunities to experience aboriginal reality - often it provides a stark contrast to the corporate environment in which government and industry officials are used to working.

Land and Tenure

Land and the resources in and on that land are not seen the same way by different people, particularly if those individuals comes from different cultural backgrounds. Further, cultural groups are not homogeneous: different people from the same cultural group will hold different perspectives on an issue. There are even discrepancies regarding whether land is occupied or not: for example, a particular area of land may appear to be unoccupied to the eyes of non-Aboriginals, while to

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[154] Processes of verification were discussed extensively in Chapter 5.

First Nations people the land is occupied and used in both traditional and "modern" pursuits. Aboriginal people may view land use as tied very closely to their daily lives, spiritual beliefs, and future for their children. The land is not something to be owned, but to be cared for and the interest may be to maintain a way of life that is practiced on that land. It may also be desired to develop economically, in which case the market values of resources must be considered. In this case, inter-generational conflict is likely to occur between traditional resource users, who may be represented by elders, and the younger political leadership. It may be the case where the leadership, composed of younger individuals, sees the need for long term economic development involving resource extraction in order to provide jobs and opportunities for many sectors of the community. The older people may have tremendous difficulty with the fact that harvesting resources results in what they see as damage to the land and habitat. While they want jobs and healthy lifestyles for their grandchildren, they are faced with the contradiction of the modern industrial economy and what that entails - in a sense, the elders are coming face to face with modernization and the creation of new forms of dependency.

Aboriginal stakeholders may have the right to use the land but, depending on policy and legislative arrangements, Aboriginal stakeholders may not legally own the land. In the Province of Alberta, this is indeed the case off-reserve. What is required in the development of a successful cooperative management implementation plan, as well as in the development of workable forestry management plans,[155] is compromise within limits. For example, it is unlikely an Aboriginal hunter will willingly destroy the habitat of the wildlife that is hunted for subsistence. Equally implausible is the forest company that willingly stands by and loses profits that could be generated through logging activities on land for which the company holds a license. What is reasonable is for each stakeholder to understand the perspective of the other and compromise through, for example, moving buffer zones back from riparian areas in an effort to protect habitat, or logging different areas in different years.

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[155] The reader is reminded that the forest management planning process is discussed in detail in Chapter Two.

Successful resource management agreements elsewhere demonstrate that Aboriginal stakeholders do share many concerns about effective resource management with the non-Aboriginal residents of an area[156]. These common interests may provide a basis for the attainment of common management goals, in spite of perceived and legal land ownership differences. Land and resources can be cooperatively managed through an acceptance of and respect for the different views and land-use rights of stakeholders, as well as meeting the conditions outlined previously. Fisher notes that:

> ...the very notion of rights implies a process of claim and recognition, which, by definition, must allow for disputes. Further, use-rights change and evolve. Nevertheless the complexity of social processes and exceptions to the rule should not obscure the fact that any effective system depends on a fairly clear-cut user group with fairly clear-cut rights. Without these features, no effective social arrangements exist for regulating forest use. *Unregulated access and use do not comprise a management system* (1991:7).

Management Structures

The political and economic climate, nationally and globally, requires paradigm shifts from top-down planning approaches where government makes the decisions and controls the resource, to more community-based approaches. This marks a substantial shift from earlier modernization and dependency frameworks as local resource users now must be involved in decision-making, rather than simply being the "extractors" of the resource on behalf of large corporations and western government[157]. Whether this involvement is actual and meaningful and/or whether it is politically expedient is not the issue of this dissertation.[158]

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[156] This is particularly noteworthy in the *Yukon Umbrella Final Agreement; Champagne and Aishihik First Nations Final Agreement; First Nation of Nacho Nyak Dun Final Agreement; Teslin Tlingit Final Agreement; and Vuntut Gwich'in First Nation Final Agreement.*

[157] See Appendix A. The Whitefish Lake-Province of Alberta Memoranda of Understanding and Agreement provide the terms for timber extraction from the specified forest management area and provide the terms for commencement of cooperative management discussions.

The concept of "partnership" as demonstrated through the composition of resource management board structures is critical to the success of cooperative management. It has been demonstrated previously that partnerships are necessary in order to manage a resource effectively - whether that resource is a national park, conservation area, forest, or a mineral find/body. Unless clearly defined, however, the term "partnership" becomes nothing more than an esoteric concept, evoking emotional responses akin to drinking hot chocolate on a cold winter night. The greatest challenge for resource management regimes is, therefore, reconciling extremely diverse interests and conflicting demands. The resulting management system is often tenuous and fragile, unless entrenched in a legislatively endorsed agreement of one form or another[159].

Structures[160] can take a variety of forms. No matter the structure, the stakeholders in the resource management structure must have a realistic perception of both political and economic realities within which the resource is to be managed, in addition to a realistic assessment of their own power bases and capacities. In the context of formal resource management structures between two or more stakeholders, there are a variety of boards, councils, and advisory structures that may be developed to manage a resource. These include, for example: land use planning boards and commissions; land and water boards; fish and wildlife management boards; renewable resource councils; surface rights boards; heritage management boards and councils; dispute resolution councils; and resource sector-specific management planning boards. They take a variety of forms; however, within a broad range of variability, the three most common are advisory boards; management boards; and joint stewardship boards.

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[158] In the case of Whitefish Lake, the Memorandum of Understanding provides for the formal involvement of the First Nation in the cooperative management of forest resources, as well as a process provision for potential involvement in commercial fisheries. As a result, substantial onus is placed on the First Nation to undertake activities that will provide for meaningful involvement in resource management and decision-making. Otherwise, "involvement" is merely wishful thinking.

[159] It would appear that without the full force of law, "an agreement" may be voided after a change in government (or a corporate take-over, or a new band council) (personal communication, Milton Freeman, June 1996).

[160] It is not possible nor relevant to review individual management board structures in detail in this document owing to the volume of material available throughout the world. It is helpful, however, to examine board structures that have been created through land claims institutions in Canada. See Appendices N, O, Q, and V.

Advisory boards are the most basic form of a resource management board. They do not have decision-making powers, and power is limited to the making of recommendations to the appropriate minister. These boards range from community committees to various land claim boards established through legislation, regulation and policy. Management boards are considered to be mid-range, consisting of quasi-judicial tribunals and panels whose decisions are usually binding. The third category, joint stewardship boards, represent the most autonomous form of resource management board as they are completely de-centralized and operate at arms length, have input into all aspects of decision-making which affect resources that fall within their jurisdiction, and provide equal decision-making powers between the government and local communities.[161] There are also a variety of informal management structures that are effective, such as those in place in the management of Australia's Kakadu Park.[162]

Essentially, the resource management board carries out the cooperative management of forest, fish, wildlife, furbearers and other resources through the resource management agreement developed by the stakeholders. Responsibilities may include all or part of the following: management plan preparation; decision-making consistent with the management plan; cultural resources management; habitat management; watershed management; protection and management of trees, plants, animals, and birds; cooperation with those in adjacent areas; rehabilitation of areas damaged through human impact and industrial development; development and implementation of communication programs; the harmonization of traditional aboriginal activities with industrial development; the development and implementation of third party consultation processes; the employment of Aboriginal people in both management and industrial development; the development and implementation of resource management inventories and strategies; monitoring and evaluation; and dispute resolution mechanisms.

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[161] An example of this structure is provided in Appendix P *Porcupine Caribou Management Agreement* between the Government of Canada, Government of the Yukon Territory, the Government of the Northwest Territories, the Council for Yukon Indians, the Inuvialuit Game Council, and the Dene Nation and the Metis Association of the Northwest Territories.

[162] See Chapter 6.

Dispute Resolution

For many years, the common mechanism of dispute resolution in existence between Aboriginal people and government was through the courts. Indeed, for a period of time in Canada the courts found themselves in the dubious role of establishing policy through litigation - a task that usurped legislative prerogative. In addition, these cases resulted in tremendous legal fees, lost time, lost good will, and no contribution was made to the development of "rational management" (Axon 1994). Concerns about the litigious nature of this relationship and the past reliance upon the judicial system have led to changes in the perspective held by both Aboriginal resource-users and government regarding the nature of dispute resolution. Alternative methods have been sought as the preferred mechanism - methods that do not rely on adversarial mechanisms such as litigation.

Dispute resolution is part of resource management discussions, negotiation, and implementation and is a necessary fact[163], given the diverse elements to be managed. The cooperative management agreement itself is really a form of dispute resolution, as it is the result of a process of joint decision-making between the stakeholders with respect to joint policy development, the development of joint management structures, and the development of joint management plans. Dispute resolution clauses that refer the actual matters that may come under dispute may also be outlined in cooperative management agreements, bearing in mind that the mechanism for resolution depends on the problem to be solved. The following mechanisms relevant to this research are noted: single intervention whereby a mediator has been used to assist negotiations arising from specific events; specific grievance proceedings, which permit the review and intervention of the Minister under certain circumstances; and other bilateral or tripartite agreements that include the establishment of equal representation of Aboriginal stakeholders and government on resource management boards, or provision for dispute resolution within specific development agreements.

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[163] Most of the literature reviewed made no provision, whatsoever, for dispute resolution.

Given the importance of the land and its resources to First Nation world views, provincial management, ownership responsibilities, and industrial development, the success of cooperative management dispute resolution processes depends on the degree of autonomy held by cooperative management boards and the equality of representation. Representation and shared management authority between the stakeholders must be equal; otherwise, the agreement and the process may not succeed. It is not possible to have true, liberal-democratic "co-management" when all stakeholders do not have equal financial, political, or legislative power. This is discussed below.

Cooperative Management, Co-Management, Joint Management?

The use of terms is critical in any development framework and, in the case of resource management, establishes the nature of the power relationship between the stakeholders. While the rhetoric espoused by various political leaders regarding partnerships, equality, full decision-making, and other statements leads one to assume that all stakeholders in the resource management enterprise are equal, in reality this is not the case. It is simply not possible for each stakeholder in a resource management process to enjoy equal legislative and regulatory authority. It also is highly unlikely that indigenous resource users will have the financial power to bring to bear that industry and government stakeholders do. As a result, it is my view that the management process must be looked at from a realistic perspective and dealt with accordingly. This is accomplished, in part, through an acceptance of terms.

The term "co-management" is frequently used in the literature and by individuals working in Canada to imply equality between the stakeholders. The Government of Alberta does not provide for the use of this term in discussions with Aboriginal resource users, however, as government does not wish to create a false perception of legislative equality. My field research has demonstrated that in Alberta, the term "co-management" implies two equal partners which is the consequence of a government-to-government relationship. This is not the case in the relationship between Aboriginal First Nations and the Province, as the Province has full constitutional responsibility and jurisdiction for resource management. The term "joint management", used extensively in Australia, is meant to imply an equal relationship between the stakeholders, and emphasizes regulatory power and control without concentrating on issues of legislative jurisdiction. The essence of the term "joint" lies in the relationship between the stakeholders, rather than the power structures defining the relationship between the stakeholders. To those using the term "joint management", the use of the term "co-management" can be offensive as it concentrates primarily on the inequality of the relationships involved in managing a resource (personal communication, Athol Chase, April 1996).

In the Province of Alberta, the term "co-operative management" is used, as much through direction provided by specific departments as for any other reason. Co-operative management is defined through the Whitefish Lake - Province of Alberta Memorandum of Understanding as "a process of consultation and cooperation on matters of mutual interest". Simply put, cooperative management as defined through my research[164] represents stakeholders working together to manage a resource in a sustainable manner that achieves the goals of all parties consistent with their roles: protection of the resource and biodiversity through sustainable management practices; protection of the environment and biodiversity for traditional pursuits;

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[164] This perspective on cooperative management derives from my fieldwork. It is not noted in government, industry, or First Nation policy directives.

sustainable harvesting of the resource for commercial purposes; and long term economic development. In the Province of Alberta, co-operative management does not imply legislative authority, jurisdiction, or any potential devolution of same. While it may be possible to assume a position whereby First Nations are entitled to this authority through the inherent right or other aboriginal rights to self-government, in the current contexts of political reality in the Province of Alberta and constitutional realities denotive of federalism, this is not a feasible position to take.[165]

The Structural "Re-Connect"[166]

The process of cooperative management is one that I would term a process of convergence. Throughout the world, indigenous resource users and governments are attempting to adapt formal and informal institutions of management to a changing world. While during the past first and second "development decades" extractive and exploitive resource practices dominated the thinking of dependency theorists and economists, today there hasn been a paradigm shift stemming from a more challenging and competitive global arena - both economically and socially. Local/global articulations are increasing in both frequency and strength with the increase in communication and information flow between, for example, the First Nation located in Northern Alberta and the small village located near Dakar, and the realization that the distinctions between "developed" countries and "underdeveloped" countries are becoming increasingly blurred as those who were once considered developed are facing up to internal conditions of poverty and exploitation. This fact underscores the tension that lies in development research. While conditions of exploitation have led to pathological outcomes, it is no longer feasible to take shelter in the rhetoric of modernization and dependency as conditions that defined these relationships are found within indigenous communities themselves. On a broad scale what is feasible, and of far more use to indigenous communities and governments alike, is assisting in the process of realistic, meaningful indigenous involvement in industrial activities such as mining and forest resource harvesting. This can only be accomplished through the process of building convergence noted by Dia as the heart of the institutional reconciliation paradigm:

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[165] The statement was made "...we need jobs for our kids. We can't feed our kids treaty rights" (Anon. January 1996). Many people in First Nations communities would disagree with this statement; however, it is my experience that just as many agree.

[166] This term is used based on the research of Mamadou Dia, carried out in Africa for the World Bank and published as *Africa's Management in the 1990's and Beyond* (1996).

> ...the institutional crisis affecting economic management in Africa is a crisis of structural disconnect between formal institutions transplanted from outside and indigenous institutions born of traditional African culture...both formal and informal institutions are here to stay and are needed...but in a more flexible form. Formal institutions need to be adapted to the local context in order to build the legitimacy needed for enforceability; informal institutions, although rooted in local culture, also need to adapt to the changing outside world to maintain their relevance in a more challenging and competitive global arena (1996:vii).

This perspective is taken in the following chapter, demonstrating a structural "reconnect" between Whitefish Lake First Nation and the Province of Alberta, through a proposed co-operative management implementation plan.

The Human Theory of Development: Policy and Reconciliation

This thesis is about resource management as a process and it is about change. In policy theory, I have found three primary types of change relevant to theoretical development and resource co-management: incremental change, radical change, and reconnective or cyclical change. These can be seen clearly in the 1992 *Mabo* decision - the Australian landmark case on Aboriginal title at common law[167]. The decision of the High Court is noted by Bartlett (1993) as predictable and unremarkable, bringing Australia into line with the rest of the common law world. Bartlett further notes, however, that reaction to *Mabo* has regrettably not been unremarkable:

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[167] *Mabo* was seen as a long term resolution to the question of the rights to land of Aboriginal people in Australia. The source of Native title is the traditional occupation and use of land by the Aboriginal people. Title is given its content by the traditional laws acknowledged by and the traditional customs observed by the indigenous inhabitants of a territory. The nature and content of native title may vary between different groups of Aboriginal people, and may vary in its nature and incidents. It is immaterial that the laws and customs have undergone some change since the Crown

> The assumption of all the non-Aboriginal organizations has been that Native title should in large part legislatively be overridden and extinguished or suspended irrespective of the agreement of Aboriginal people (Ibid:1).

Commercial mining interests in Australia have sought the rejection and diminishment of the *Mabo* decision. Indeed, the former President of the Australian Mining Industry Council declared that the concept of native title should not have been applied to the Aboriginal people because "they were at such a primitive state of development that no treaty with them was possible" (Ibid:12). Other chief executives of mining companies made similar observations and suggested that future projects and investment had been put at risk by the decision. The need to remove uncertainty by validating existing interests and overriding Native title was stressed.

These changes were not made and the decision of the High Court stands. The settlement of Native title remains under discussion, and current debate regarding amendments to the *Native Title Act* remain strident. The following example illustrates the point, however, that by taking common sense principles of human nature and structural considerations of resource management, and working together to reach an agreement, a climate of cooperation can be achieved and agreement reached. In January of 1993 Zapopan Mining, the Northern Territory Government, and the Jawoyn Association Aboriginal Corporation reached a land settlement agreement which provided land to the Aboriginal people and allowed a gold mine to go into production at Mount Todd. Bartlett notes that both the mining company and Aboriginal people have spoken strongly in support of the process:

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acquired sovereignty provided the general nature of the connection between the indigenous people and the land remains (Bartlett 1992, 1993, 1994). Prior to *Mabo*, Native title had been protected by the *Racial Discrimination Act* of the Commonwealth since 1975.

> ...it surely should be seen as a model, a way of creatively approaching the issue of native title so that the High Court's recognition of indigenous rights in this country can be used to extend and not limit, benefits to Aboriginal and Torres Strait Islander people (1993:18).

Mabo was many years in the making and change was represented during this period as incremental. Once the decision from the High Court came down, the realization on the part of non-Aboriginal people as to the nature and content of aboriginal title put a radical spin on the characteristic of change. To date, the implementation of *Mabo* is represented as a cyclical process as the form of possession under the laws and customs of the people evolves. The reactions of many non-Aboriginals to this evolution are indeed extreme and varied. This same process applies to the nature and process of the Implementation Plan discussed in Chapter 8 as an attempt is made to reconcile policy, economic development, politics, and culture.

These issues of human nature, management, structure, and policy represent to me the components of a human theory of development. It is the applied theoretical development based on: reality as opposed to rhetoric; considerations of power, knowledge, and personal investment; issues and realities of profit and loss in both human and financial terms; the realities of economic participation and environmental conservation; land tenure and ownership; the nature of the collectivity as opposed to the individual; and the critical importance of culture in the implementation of decision-making, dispute resolution, the acceptance of responsibility, and the perceptual basis of power equity. The Implementation Plan in Chapter 8 contains these components, plus others which have been noted throughout Chapter 7.

In the specific case of Whitefish Lake First Nation and the Government of the Province of Alberta, what is crucial is the fact that in the interest of reaching agreement on a workable and practical resource management implementation plan, the stakeholders have come together based on the perception that both parties are equal players. They have put rhetoric and differences aside regarding who has more money, power, influence, and are operating on principles of equality, equity and fairness that do not exist in reality owing to the power, financial and knowledge imbalances between the parties. The Implementation Plan reflects realistic co-operative management, as through the planning process technocratic, scientific and traditional ecological epistemologies are reconciled.

8. Reconsideration and Reconciliation:
The Co-operative Management Implementation Plan

Honest? Why? Didn't you learn anything through this whole process?

Anonymous

Genuine paradigm shifts occur as stakeholders come face to face with the necessity of adapting their own structures, positions, and values, to bring them into line with the development needs of the group.

Mamadou Dia, *Africa's Management in the 1990's and Beyond: Reconciling Indigenous and Transplanted Institutions*. 1996:246.

...true development means a great measure of self-reliance, a willingness to initiate basic social and structural transformations, a determination to diminish some of the present inequalities, a readiness to involve ordinary people in the development process...many of the things we do and can do are building for the future, are helping to prepare the ground for the day when political will exists, helping to bring that political will into existence.

Jack Westoby, *The Purpose of Forests*. 1989:213-214.

And men cannot fashion sound development unless they first engage in disciplined normative reflection and transform ethics into a "means of the means" transfusing other instrumentalities - planning, technical transfers, and efficiency systems - into liberating agencies. Failing this, development's blind forces will make men into their own image: process without goals, power and abundance without freedom.

There would be one minor consolation in such a world, however. Cruel choices would no longer exist. Indeed, all choices, cruel and benign, would have been consigned to oblivion.

Denis Goulet, *The Cruel Choice*. 1971:330.

Introduction

It was suggested in the previous chapter that the process of co-operative management is, in my view, a process of convergence which is necessary after years of "structural disconnect" (Dia 1996). This concept can assist in the development of a co-operative management implementation framework between Whitefish Lake and the Province of Alberta, as implementation is part of re-connecting what Dia refers to as indigenous and transplanted institutions.

This chapter will provide a discussion of the principles involved in structural "re-connections". It will then provide an Implementation Plan for co-operative resource management that is intended to be used as the basis for discussion between Whitefish Lake First Nation and the Province of Alberta. The final outcome of this process, following upcoming discussions, will be the decision of the members of the Co-operative Management Steering Committee[168] and Cabinet.

The Structural Re-Connect

Improved institutional performance and resulting sustainable economic development is a more achievable objective when indigenous and formal institutions converge[169]. This is noted by Dia as an:

> exercise that brings together dominant societal values of indigenous cultures on the one hand, and technical and organizational ideologies supporting modern institutions (emerging mostly from Western development contexts) on the other" (1996:242).

At least three major requirements are involved, however, for reconciliation between indigenous institutions and transplanted institutions: 1) the need for a new, genuinely participatory process that focuses on building convergence between formal and informal institutions and on empowering beneficiaries and local communities; 2) a communications system that ensures access and a voice for a larger number of indigenous stakeholders at the local level; and 3) a reasonably stable institutional and political environment (Ibid:241). In order to be effective, institutions must be recognized as more than organizations; they must be seen as sets of structured and lasting patterns of relationships and roles that are guided and supported by broad societal values, regulated by rules, and implemented by organizations.

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[168] The composition of this Steering Committee is discussed in Chapter One.

[169] Dia defines formal institutions as those transplated from the outside, while indigenous institutions are born of traditional culture and are rooted in local culture. Questions of legitimacy, enforcement, societal expectations, behaviours, and incentive systems apply to both formal and indigenous institutions. The success of the structural re-connect depends upon the possibilities of reconciliation between the transplanted (formal) and local (indigenous) institutions (1996).

Dia notes six phases in the reconciliation process that have been considered in construction of the Working Procedures: definition and identification; lobbying; caucus formation and capacity building; dialogue; joint implementation; and joint monitoring and feedback. In the first phase of definition and identification, possible development paradigms, the identification of the stakeholders, a definition of the resource management situation, resource needs and other issues are outlined. The second phase of lobbying includes the development of interpersonal contacts between facilitators, key community leaders, and other stakeholders. The aim is to build legitimacy and trust among the stakeholders, as areas of misunderstanding and conflict are identified. This phase clarifies the "social dynamics of the community, the power plays and political aspirations of key players, and their perceptions of one another" (Ibid:244). During the third phase of caucus formation and capacity building, stakeholders work with their own constituents to ensure a basic understanding of the reconciliation (i.e., co-operative management implementation) process. During this period, gaps in knowledge can be outlined, strengths and weaknesses of systems denoted, and development needs put forward. Capacity building also proceeds in tandem during this phase. The fourth phase of dialogue is designed to generate a common focus and broaden the common ground among stakeholders. During this phase, it is crucial that the stakeholders each make a genuine effort to understand each others' positions and differences. Through differences and similarities, needs and objectives are priorized and management plans mutually agreed upon. As noted by Dia, there is a danger during this phase of working groups degenerating into "talk shops" rather than energies being devoted to real on-the-ground projects. It is also critical for each stakeholder to work with those they represent in the fostering of understanding and joint management processes.

This includes the importance of institutional development at the local level. The fifth phase of joint implementation concentrates on the building of local institutions, as the core of operational planning. The final phase of joint monitoring and feedback is designed to ensure constant feedback of progress, to provide positive reinforcement, and to correct mistakes as the implementation process unfolds.

These phases are not sequential, nor are they distinct. They do, however, provide a broad framework for the development of co-operative resource management in general, and forest resource management in particular, between Whitefish Lake and the Province. The Memoranda of Agreement and Understanding between Whitefish Lake and the Province of Alberta regarding the co-operative management of forest resources[170] actually provides the framework for the convergence of indigenous and government management institutions. No "new" co-operative management model is necessary: the Whitefish Lake-Government of the Province of Alberta Memoranda only require implementation. In view of this, "Working Procedures" have been developed that are based on: an examination of many other models and my own knowledge of the current case.

Whitefish Lake and Forest Management

Community research demonstrates that a perception exists among residents that two distinct processes exist: the implementation of the Memoranda of Agreement and Understanding through the harvesting of the quota outlined in the deciduous timber permit; and the community processes pertaining to economic development, business opportunities, the harvesting of forest resources, and the impact of these factors on renewable resource management in the S-9 area generally[171]. Issues arising from the community research, which with some additions, are similar to those noted by the Aboriginal Working Group of the Alberta Forest Conservation Strategy, relate primarily to: traditional and current land use and occupancy[172]; trappers and traplines; harvesting and reclamation methods; buffer zones; integrated resource management; forest management agreement discussions; meaningful long term economic development and business development opportunities; oil and gas activities; training and education of children and youth; and lack of adequate information. Whether many of these issues have arisen as a result of miscommunication or misinformation is not relevant; no matter the source of an issue, it still must be dealt with[173].

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[170] The reader is reminded that the full text of the Memoranda of Agreement and Understanding are contained in Appendix A. Discussion is presented in Chapters One and Two.

[171] For a list of Management Objectives contained in the Whitefish Lake Forest Management Plan, see Appendix R.

The following section will attempt to address many of the issues raised and perceptions held, based on principles of sustainable co-operative management, integrated resource management, and meaningful economic and business development. This will be done through the following "Implementation Plan of the Co-operative Management Agreement Between Whitefish Lake First Nation and The Government of the Province of Alberta" for submission to the Co-operative Management Steering Committee. The format for this section presents portions of the text of the relevant Memoranda, with procedural recommendations. The text contained in boxes represents those issues which will require discussion and/or decision by the Steering Committee members.

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[172] Categories of land-use have been developed by Silvacom Ltd., in consultation with Whitefish Lake, to provide for scientific management. The First Nation is currently in the process of re-working these categories to provide for indigenous management. See Appendix S.

[173] One of the issues mentioned previously is the communication between trappers and the forest industry, regarding harvesting activities on traplines. It is noted in the Implementation Plan that this issue must be dealt with through the development of more appropriate notification mechanisms, in addition to other considerations. A sample letter of current communication practice is contained in Appendix T.

Implementation Plan of the Co-operative Management Agreement
Between
The Whitefish Lake First Nation
and
The Government of the Province of Alberta

WHEREAS the Parties signed the documents entitled Memorandum of Agreement and Memorandum of Understanding December 12, 1994;

AND WHEREAS the Whitefish Lake First Nation - Province of Alberta Steering Committee was established to undertake consultation regarding the objectives of this Agreement (MOU s.3);

AND WHEREAS the objectives of the Agreement provide for the development of a process of mutual cooperation and consultation on natural resource matters in F.M.U. S-9 in order to attempt to resolve issues of concern (MOU s.1);

AND WHEREAS the parties will within six months consider and make recommendations regarding the potential participation of other Parties in sub-committees established pursuant to the Working Procedures;

AND WHEREAS the principles of resource management within the F.M.U. S-9 are based on sustainable development, integrated resource management, protection of the environment, and enhancement of biodiversity;

This should be discussed by the Steering Committee as a guiding principle.

AND WHEREAS increased participation of Whitefish Lake residents in employment, management planning, and land use decision-making through joint administration, employment contracts, direct contracting and other means require qualified Aboriginal resource managers;

AND WHEREAS Whitefish Lake First Nation has primary responsibility for the maintenance of community values and traditions and the well-being of Whitefish Lake people;

Throughout the process of community research, it has been made clear that Whitefish Lake is a community that is capable of assuming responsibility for its own future and is, indeed, doing that through initiatives such as sustainable forest harvesting.

AND WHEREAS the Parties give recognition to the principle that resource management principles and practices are largely a reflection of cultural values and therefore resource values must be defined in a cross-cultural context;

Through the co-operative management process and the willingness of Tolko Industries Ltd. to be part of management change, it is clear in this area of the Province that community-based co-operative resource management is becoming a reality. This clause should be discussed by the Steering Committee to ensure agreement and a full understanding of what is meant. This subject includes issues such as non-market values of trees, as well as indigenous management practices in relation to current silvicultural and reclamation practices, and various methodologies that can be used to undertake the work.

AND WHEREAS the Parties agree that both traditional ecological knowledge and scientific knowledge will be given equal weight in the management of resources, including forests, and will be treated as equally valid forms of knowledge;

AND WHEREAS in the Memorandum of Understanding the parties have agreed that the Steering Committee shall be responsible for identifying key resource management issues and areas of concern; for establishing processes to address these key issues; and for recommending processes to resolve issues, including development of recommendations for policy interpretations or changes in policy that may be required to achieve the objectives of the Memorandum of Understanding (MOU s.3);

AND WHEREAS Fish and Wildlife and Land and Forest Services will work together with the Whitefish Lake First Nation to provide guidance in long range wildlife management and timber management to arrive at a long range resource management plan for the area (MOA s.A.1.para.6);

It is suggested that this long range resource management plan be completed within a six month timeframe.

AND WHEREAS the representatives of the Parties have developed these Working Procedures which identify certain activities to be undertaken;

AND WHEREAS the Parties agree that it is the responsibility of the Government of Canada to provide adequate levels of funding to Whitefish Lake First Nation to undertake the implementation of resource co-operative management initiatives;

AND WHEREAS Whitefish Lake agrees to undertake the attempt to secure funding from the Government of Canada to support research, training and employment initiatives;

AND WHEREAS the Province of Alberta agrees to support the implementation of co-operative management through this Implementation Plan;

AND WHEREAS this process is consistent with the statements made by the Honourable Ty Lund, Minister of Environmental Protection, December 12, 1994;

NOW THEREFORE the Parties agree as follows:

1.0 The Implementation Plan will cover the area of F.M.U. S-9.

The issue of the shortfall remains outstanding. Resolution is contingent upon Alberta Environmental Protection approval for the addition of the four contiguous townships to the east of the current Whitefish Lake deciduous timber permit. Further, we need to double check this shortfall figure as there is a discrepancy between the two sets of figures provided by Environmental Protection and those provided by Tolko Industries Ltd.

2.0 The parties will undertake a process to secure for members of the Whitefish Lake First Nation a portion of the commercial fishery allocation in the lakes within F.M.U. S-9, including Atigameg (MOU s.2.iii);

3.0 The co-operative management process is intended to increase employment opportunities for Whitefish Lake natural resource managers, technicians, and others as opportunities in forest and other sectors, particularly silviculture and activities related to integrated resource management, arise (MOU s.2.ii, MOA s.B.1);

The implementation of integrated resource management should be discussed further. For discussion purposes, community research demonstrates that forests cannot be managed in isolation of ungulates, furbearers, plants, watersheds, berries, etc. The elders, in particular, have made this very clear. This is also consistent with the report of the expert review panel of the management of forests in Alberta, and the government response to the report.

4.0 That the following Implementation Plan will guide co-operative management endeavors;

5.0 The Parties will examine current capacity and requirements within the management structure established by this Implementation Plan for successful implementation of the Whitefish Lake-Government of the Province of Alberta Co-operative Management process;

6.0 That this Implementation Plan will provide for the development of action plans that reflect realistic timelines and capacity; and

7.0 That the following Projects and/or Initiatives will be undertaken and completed within a twelve month time frame, unless specified otherwise.

It is understood that Whitefish Lake will undertake to secure sufficient funding from the Government of Canada to complete the following.

Time lines included in this draft document are estimates only. Usually, traditional land use studies take anywhere from twelve to eighteen months, depending on human and financial resources available. Also meeting time lines and completion depends upon the commitment of the Steering Committee members regarding monitoring of the research, the availability of co-ordination at the community level, other government and community commitments, and the provision of adequate funding from the Government of Canada. These timelines will obviously have to be adjusted according to fiscal years.

7.1 Research Projects (See MOU s.3.para.3)

7.1.1 Traditional and current land use and occupancy studies, components of which include:

- inventories and mapping of all forest values (including non-market forest values);
- old village and burial sites, spiritual places and ceremonial grounds;

- archaeological values;
- riparian areas;
- buffer zone requirements;
- fish and wildlife;
- habitat protection and reclamation;
- migratory birds and waterfowl;
- furbearers;
- traplines;
- traditional trails and current trails;
- vegetation (including rare and endangered plants, medicinal plants, sacred plants);
- recreation;
- traditional harvesting sites;
- non-renewable natural resources such as minerals, oil and gas; and
- treatments carried out on forest land, such as harvesting and renewing trees.

7.1.2 Reclamation Pilot Project carried out between the Elders Advisory Council of Whitefish Lake and Tolko Industries Ltd. It is recognized that Tolko Industries Ltd. is not a Party to the Co-operative Management Memorandum of Understanding.

> This project arose as a result of a field trip taken by the Elders Advisory Council, Tolko Forest Industries, and the researcher to a site that had been harvested by Tolko. There is some disagreement among the Elders as to the reclamation process that should be undertaken at the harvested sites. For this pilot project, which Tolko has agreed to run, one of the cut blocks will be cleaned with a cat and the effects monitored by the company and the Elders.

7.1.3 Research on the development of community education seminars on the meaning of sustainable development, the definition of biodiversity and the meaning of the definition, and harvesting processes. These are to be geared to different age cohorts and sectors.

Part of the difficulty in sustainable resource harvesting, particularly of forests, is the lack of awareness regarding harvesting technologies and site reclamation. For example, many people in the community think that V-blading is practiced as a matter of course by Tolko and Whitefish Lake Logging. Improved awareness is a matter of education. Most people on the street in urban centres who consider themselves to be environmentally-aware are not well-informed about forest harvesting practices. There is, therefore, no reason to expect community members to be well-informed. The Elders Advisory Council, in addition to other interested elders, could be of great assistance in this research component. This is a tremendous opportunity to effect a convergence of traditional ecological knowledge and scientific knowledge bases, leading to more effective and innovative co-operative forest management.

7.1.4 Research, design and implement a process for community awareness and education pertaining to the contents and structure of the Whitefish Lake Forest Management Plan, including the principles and practice contained in the Alberta Timber Operating Ground Rules.

7.1.5 Research, design and implement a process for improved communication between Whitefish Lake Logging, Tolko Industries Ltd., Whitefish Lake trappers, and Settlement trappers regarding consultation prior to harvesting on traplines.

We began undertaking this during the researching of this draft Implementation Agreement. Tolko Industries Ltd. is very supportive and is willing to try a new approach with the trappers of Whitefish Lake. Further, one of Tolko's staff has familiarity with one-on-one consultations with trappers in another area, which he is willing to adapt to suit Whitefish's needs.

7.1.6 Research the issue of buffer zones and road allowance with the Elders, hunters and trappers in more detail and reach agreement on buffer zone width in riparian areas, including variance as per location, for inclusion in the forest management plan.

7.1.7 Research regarding non-market values of forests and value differences between men and women who use the forest.

7.2 Oil and Gas Initiatives

7.2.1 The Parties agree to establish a sub-committee to work with the Petroleum Producers/Operators that have an interest in the S-9 Forest Management Area. One of the roles of the sub-committee will be to relay information regarding the original intent of the Memorandum of Understanding and Memorandum of Agreement to individual Petroleum Producers/Operators from the Steering Committee members. The sub-committee will assume other tasks as required.

7.3 Employment and Business Development Initiatives

The Parties agree that prior to commencing the activities noted under 7.3, Whitefish Lake First Nation will secure adequate funding from the Government of Canada.

It is the role of the federal government to provide funding for these initiatives. It is not the responsibility of the Government of Alberta. The Steering Committee should discuss the possibility of Whitefish Lake obtaining a substantial funding commitment from the federal government through, perhaps, a bilateral agreement which references the Memoranda of Understanding and Agreement between Whitefish Lake and the Province of Alberta. If the federal government sees an advantage through Whitefish obtaining access to financial resources through forest resource management, then the federal government may see it is to their advantage to fund this process. The commitment of the Province of Alberta as per the terms of the MOU and MOA will be carried out through the implementation of this workplan.

7.3.1 The Parties agree that current provisions for economic planning within the First Nation require expansion and support owing to resource management-related economic activity and other indirect economic opportunities. The Parties further agree that there is a need to identify and develop long-term economic opportunities in the forest sector to promote greater interest among members of Whitefish Lake and other Aboriginal communities. This review includes issues entering into further contractual or joint venture arrangements with the non-Native private sector.

If this is undertaken, it has to be undertaken carefully and in a politically-sensitive manner. Nothing is ever solved by ramming into a problem. If the perception is created that Whitefish Lake is attempting to undermine current economic and business structures in northern Alberta, difficulties will arise. If the perception exists already that this is the case, then this perception must be managed. Either way, opportunities exist for residents if they have suitable education/training.

7.3.2 The Parties agree to develop a three-year strategic planning document within the next twelve months providing for: training; public information; counseling; work place support; targeted recruiting; preferences in hiring; and other such measures.

This could be problematic, owing to current perceptions in existence in the Slave Lake area held by non-aboriginals regarding Aboriginal expansion into the previously non-Aboriginal workforce. In addition, the Province of Alberta has no policy regarding preferential hiring or affirmative action. This will have to be handled carefully and worded carefully.

7.3.3 Where industry is willing to participate, the Steering Committee shall work with industry to review job descriptions and other requirements for positions to ensure that: implicit or explicit cultural bias is eliminated in the hiring and promotional process; and employment requirements are reasonable and relative to the work, and free of standards and requirements that unfairly reduce the opportunities for residents of Whitefish Lake to obtain employment and receive promotions. This will be completed within the next twelve months.

This may be handled more appropriately through an employment/business development sub-committee, that has representation from government and industry, as well as from Whitefish Lake. The sub-committee could then report to the Steering Committee. The Steering Committee would, however, be requested to provide guidance and support through monthly Steering Committee meetings.

7.3.4 Where employment projects arise in the Whitefish Lake management area, the Steering Committee agrees to work with Whitefish Lake to: examine potential employment and business opportunities including contracts and the provision of goods and services. Each of these will be dealt with on a project-by-project basis.

7.3.5 The Parties agree to examine the potential for the development of new business enterprises in the forest sector reflecting market trends for forest products and services.

This process could be assisted through government providing written notice to Whitefish Lake at the time government publicly tenders for forest resources management or forest protection. Another example is written notice of any invitation for public tenders associated with silviculture contracts.

7.3.6 The Parties agree to establish a process to work with community institutions in the development of realistic planning processes that are consistent with Aboriginal culture, but are relevant to the non-Aboriginal business sector.

In the case of Whitefish Lake resource management business and employment opportunities, this is a suggestion based on the fact that to perform effectively, institutions have to be both rooted in the local community and culture, and open to outside challenges. Otherwise, these institutions will not be able to grow and develop effectively and efficiently, as their capacity to deal with increasingly complex choices will not be sufficient.

7.3.7 The Steering Committee will facilitate the process of Whitefish Lake establishing core groups of trained individuals for silviculture and fire fighting.

7.3.8 The Steering Committee will undertake to ensure that economic/business opportunities, plans, and research initiatives are coordinated with all other initiatives noted in these Working Procedures.

These opportunities, plans, and research initiatives should also be coordinated with the Whitefish Lake Forest Management Plan.

7.4 Commercial Fishery Allocation (refer MOU s.2.iii)

This issue requires timely resolution. The Steering Committee, through delegation to the commercial fishery sub-committee, is in the process of researching potential resolutions. These potential solutions will be presented to the Steering Committee within three months.

7.5 Human Resources Development (MOU s.3.para.3)

7.5.1 The Parties agree that education and training are critical requirements for economic and business development (MOU s2.ii)

> Meeting the training and education needs of the people of Whitefish Lake is going to depend on adequate funding from the federal government. A number of initiatives can be "piggy-backed" on other employment and training projects currently in existence, thereby reducing costs.

7.5.2 The Parties shall immediately examine the needs, opportunities and structures required to ensure the adequate development of human resources needed by residents of Whitefish Lake in forest resources management, renewable resources management, and related economic and business development opportunities.

7.5.3 The Parties agree to design the structures necessary to develop these human resources.

> It is necessary to develop a Human Resource Inventory for Whitefish Lake in order to design relevant structures. It is intended that this inventory development will begin in June of 1996, through the two training positions provided by the Canadian Circumpolar Institute (CCI) of the University of Alberta through two successful SEED applications. These students will be coordinated by Whitefish Lake economic development and the CCI and jointly supervised.

7.5.4 The Parties agree to establish an education and training sub-committee, which will develop a comprehensive plan outlining the training requirements of Whitefish Lake residents in the area of resource management. This plan will provide: sources of training and education programs; existing structures and opportunities; and an inventory of human resources existing at the community level. The plan will be completed within six months.

It would be helpful to involve the following as sub-committee members or as advisors: AVC Grouard; the Northern Alberta Institute of Technology; the University of Alberta; Zeidler Forest Products; Tolko Industries Ltd.; and other interested parties. For example, the Canadian Circumpolar Institute of the University of Alberta has made successful applications for two summer student positions for Whitefish lake students. Both will be active in forest resource management research, should the funding application be successful. Tolko Industries has been approached to do the same. Whitefish Lake also has integrated two training positions in its summer employment program.

7.5.5 Plan development will also include other training directed to improving residents' ability to carry out their responsibilities.

The Whitefish Lake economic development officer is already working on a number of training programs that are designed to facilitate self-esteem, life skills, etc. These should be integrated with education/training initiatives undertaken through the Steering Committee process and co-operative management implementation.

7.5.6 An information strategy to enhance Whitefish Lake and general public awareness of the training/education plan will be undertaken as an on-going project over the course of the next year. Components of this strategy will include cultural awareness and education.

Cultural awareness orientation is necessary for both Aboriginal and non-Aboriginal populations as misconceptions and generalizations exist on both parts about the other. Quite commonly, the only orientation programs that are offered are those which explain components of Aboriginal culture to non-Aboriginals. This is not balanced, as there are many components of non-Aboriginal culture which need to be addressed and explained.

7.5.7 The Parties agree that training and education do not include only youth, young adults and adults. Training and education includes the children. One of the primary objectives of any training/education strategy will be to involve the children in activities that encourage them to stay in school and be fully prepared to take part in economic and business opportunities. A component of the strategy will, therefore, be targeted toward activities for children.

Tolko Industries Ltd. has put forward some good suggestions for involving children in Tolko activities, such as tours to the OSB mill, the pulp and paper mill, and participating in the colouring of the harvesting maps. The Elders Advisory Committee has also put forward some sound ideas, such as story telling sessions with the children about traditional land use and forest use and activities, as well as field trips. The schoolchildren will also be involved in working with scale 1:15,000 maps of the 9 townships that make up the current deciduous timber permit to familiarize them with the use of maps, the logging area and, with the little ones, to have fun colouring them. These are all low-cost to no-cost involvement strategies.

7.6 Community Renewable Resources Management Board

The Elders Advisory Council of Whitefish Lake has made it clear that forests cannot be managed in isolation of other resources. This is also consistent with the integrated management perspective taken by the Government of Alberta. It has arisen that a local renewable resource management board would be helpful in the management of forest resources on a community-wide level. It could also assist with the implementation of co-operative management between Whitefish Lake and the Province of Alberta.

This is an idea flowing from comments made at the community level regarding a lack of co-ordination between hunters, trappers, commercial fishermen, elders, petroleum producers, and implementation of forest resource harvesting. While informal institutions exist at the community level, they may not be sufficient in terms of providing coordination on issues and approaches and advice to Chief and Council on resource management strategies.

7.6.1 The Steering Committee agrees to carry out the community research necessary to determine the feasibility of:

- establishing an institution such as a renewable resources board;
- the roles and responsibilities of such an institution, such as: to encourage and promote local involvement in conservation, harvesting studies, research and wildlife management, trapline management;
- participation in data collection and provision; and
- protection of habitat.

A further role of a Whitefish Lake renewable resource council could be to make recommendations to Chief and Council regarding local management concerns for the above. This research will be carried out and recommendations made to the Steering Committee within six months.

This would not, in any way, take away from the rights and responsibilities of individual trappers. Nor would it take away from the decision-making capacity of Chief and Council

8.0 Information Strategy

This is not an "issue" per se. It is, however, a component that will contribute to a positive relationship between Aboriginal and non-Aboriginal resource users, business developers, and communities owing to a full understanding of the purpose of Aboriginal economic and business development enterprises. Two good examples of the positive use of information strategies are found in the Yukon First Nation Final Agreements and the Canadian Model Forest Initiatives.

8.1 The Parties agree to establish a sub-committee to begin work immediately on the development of a comprehensive, phased information strategy.

8.2 Information distribution will be coordinated by the Steering Committee, and will be focussed on specific areas.

8.3 Whitefish Lake representatives will take primary responsibility for informing Whitefish Lake members. Government representatives will take primary responsibility for informing departments. The Steering Committee shall take joint responsibility for informing institutions such as the Canadian Association of Petroleum Producers, corporations, and businesses in the management area.

8.4 Best efforts will be made to provide material in both Cree and English.

9.0 Forest Management Agreement Discussions

Tolko Industries Ltd. is seeking community support for a Forest Management Agreement ("FMA") application to the Government of Alberta. Community concern has been expressed regarding this application owing to the perception that the granting of an FMA to Tolko will impact negatively on the Co-operative Management Agreement in place between Whitefish Lake and the Province of Alberta.

9.1 The Steering Committee will establish a sub-committee responsible for discussions and information pertaining to the process of Forest Management Agreements in Alberta. This sub-committee will give consideration to other processes involved in the proposed FMA area. This will be done within a three-month time frame.

> In an ideal world, these discussions would be occurring with more Aboriginal communities. If this occurred, many of the misunderstandings and "myths" surrounding forest management agreements, and the perceived authority of the agreement holder, would be dispelled. This would also provide the opportunity, particularly in the Slave Lake area, for all the stakeholders to meet on an issue of common concern: the potential FMA application. This would also provide a good opportunity for Tolko Industries Ltd. to put forward its position to all stakeholders in the area.

9.2 The Parties will undertake to determine the level of community support for the potential application of Tolko Industries Ltd.

9.3 This sub-committee will determine the affects, both positive and negative, of an FMA on the co-operative management process and existing agreements, and will report to the Steering Committee within three months.

10.0 Dispute Resolution

The Parties agree that processes of dispute resolution pertaining to the implementation of these Working Procedures are defined through mediation processes.

Reconciliation and Reconsideration

Through the process of co-operative resource management development and implementation, the Government of Alberta has undertaken to reverse the conditions of underdevelopment that have been experienced by First Nations - in particular, the case of Whitefish Lake. Dependencies were created in the past owing to an erosion of traditional lifestyle, residential schools, and the implementation of the state welfare system as subsistence economies were undermined by the wage economy. Modernization was viewed as the path to economic development, with the result that communities continue to face extreme difficulty bridging both the traditional world and the modern world. As the fashions of development theory have changed over time, however, one variable has remained the same: "we have to start from where we are" (Westoby 1989:220).[174] As both indigenous and non-indigenous institutions are "here to stay" (Dia 1996), the reconciliation and convergence of resource management institutions at both local and provincial levels, with the meaningful involvement and participation of community people, is required. This means a recognition on the parts of all stakeholders of the validity of alternative forms of understanding and knowledge of issues, and taking this understanding and applying it to current management realities. It means also putting personal and cultural differences aside, including those arising from power and equity issues, and working as a team to manage dwindling resources in a sustainable, culturally relevant manner. It also means thinking about what is best for the collective, rather than what is best for the individual. All of these "meanings" are, however, essentially without meaning if they are not operationalized on the ground. This can be accomplished through the continuation of the process undertaken by Whitefish Lake and the Province of Alberta, and successful implementation of the Co-operative Management Memoranda.

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[174] Westoby notes the story of the Irishman who, when asked the way to Ballycullish, replied: 'If I wanted to get to Ballycullish, I wouldn't start from here.' We have to start from where we are; we have to face the facts of life.

Sustainable forestry is a social process, and co-operative management is as much about the relationships between the stakeholders as it is the technical planning of forest management. As was noted previously in this dissertation, agreements are only as good as the paper they are written on if they are not implemented on the ground. As noted by Goulet (1971:329) "the crucial point is to distinguish creative steps from palliatives which delude people into thinking problems have been met when in fact they have only been disguised". The aim of this process, in addition to the obvious desire for sustainable forest management, is to see Whitefish Lake First Nation succeed in the development and implementation of economic and business opportunities, resulting in a healthier, sustained community. It is not to further a stagnation of Aboriginal economic growth and self-sufficiency.

All of this must be undertaken in a realistic manner. Successful change may be incremental[175]. It will not do simply to improve the present mechanisms of technical assistance to communities. The actual convergence of management institutions between indigenous, local institutions and technical institutions of government and industry is more than just a "tinkering with the system" (Yin et al 1977). This reconciliation, through participatory means that extend beyond mere consultation, must take place in order to alleviate power, move toward a redressing and rebalance of power inequities, develop local capacity, maximize local ownership, and address the legitimacy needed for enforceability and sustainability. This research has provided the foundation for demonstrating that such a reconciliation of "indigenous and transplanted institutions" (Dia 1996) is, indeed, possible and is crucial for meaningful change to occur - in this case, meaningful change defined as the co-operative management of resources between First Nation, government and industry in a sustainable and equitable manner. What the stakeholders in this process do with the opportunities they have been provided with will only be answered with time.

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[175] It has been noted that the nature of incremental change is open to extensive debate. One debate centres around descriptive arguments reflecting strategic planning which assumes a capacity to achieve change based on "real world" descriptions. The second is normative; e.g., if a group is fundamentally poor, then any minor adjustments will leave them in a bad way. Radical change is not a solution, however, as it puts people off-side. This has been demonstrated in Australia, for example, in the conservative backlash that occurred with the Whitland government in 1986 as it attempted radical reform. When Labour returned to power in Australia in 1993, it undertook long range plans to introduce radical change piece by piece. There are also real discontinuities in "how the real world works" in areas of radical and incremental change if one examines government expenditures over a ten-twenty year period, or examines external interventions found in examples such as the Australian Mabo judgement and the Canadian Sparrow decision. In other cases, the only way to deal with some of the harder issues is to confront them directly and worry about the backlash later. The balance between the two perspectives on change may be kept by not worrying about the outcomes as, if you get people involved in process without raising outcomes, the process develops on its' own (personal communication, Ciaran O'Faircheallaigh, May 1996).

9. Conclusion

My greatest anticipation of applied anthropology has much to do with the jumble of feelings I have when I visit the Vietnam War Memorial. The strange and haunting beauty of the memorial is in its polished black granite facade - a surface that, however we approach it, reflects our image and mirrors our contemplation...It may well be that the ironies and conflicts inherent in anthropology's sense of purpose had to wait for the emergence (and threat) of a strong and critical sense of application. I have stood at the memorial many times and wondered what it means. Its meaning, I must conclude, is in the making.

Erve Chambers, *Applied Anthropology - A Practical Guide*, 1985:329-330.

In choosing to study the social world in which we are involved, we are obliged to confront...a certain number of fundamental epistemological problems, all related to the question of the difference between practical knowledge and scholarly knowledge, and particularly to the special difficulties involved first in breaking with inside experience and then in reconstituting the knowledge which has been obtained by means of this break. We are aware of the obstacles to scientific knowledge constituted as much by excessive proximity as by excessive remoteness...

Pierre Bourdieu, *Homo Academicus*, 1988:1.

We must learn how to protect ourselves from being beaten down...by insistence that every field study must be linked directly to theory.

Harry F. Wolcott, *The Art of Fieldwork*, 1995:183.

Since the decline, in most quarters, of belief in a single and sovereign scientific method and the associated notion that truth is to be had by radically objectivising the procedures of inquiry, it has become harder and harder to separate what comes into science from the side of the investigator from what comes into it from the side of the investigated. In anthropology, in any case, and in my case anyway, assuming either has anything to do with science, the indivisible experience of trying to find my feet in all sorts of places and of the places themselves pressing themselves upon me seems to have produced whatever has appeared under my professional signature. Indeed, it has produced that signature itself.

Clifford Geertz, *After The Fact*, 1995:135.

The Course of Knowledge Production

As discussed in Chapter Three, the use of theory in research is helpful, at least in my own circumstance, as it provides somewhat of a "roadmap" to guide the research process. As with any roadmap, there are a multitude of directions that can be taken depending upon where you want to get. In the case of Whitefish Lake-Province of Alberta co-operative management, the roadmap laid out in Chapter Three of modernization, dependency, and the culture of poverty provided me with guidance in spite of a number of shortcomings that have been noted throughout this dissertation. This "roadmap" also led to a re-integration of power, knowledge, and reflexivity noted by Foucault and Bourdieu as I am of the view put forward by Wolcott in *The Art of Fieldwork* (1995) that theory should be introduced into the final account - in whatever role it actually played during the field research and write-up:

> What theory does is call attention to, and offer strategies for coping with, the dual problems of purpose and generalization. It is also a reminder that we ourselves need to be thinking about the underlying issue tersely summarized in a two-word question always on the tip of some skeptic's tongue: So what?" (Ibid:189).

This final chapter offers the contribution theory played in my research, as well as future considerations useful in the link between theory and practice. It is, in essence, an attempt to answer the skeptic's "so what".

Theory and Practice: Limitations and Successes

There is a lack of pure, anthropological theory that can be successfully used in applied/developmental field settings. For many years, dependency and modernization frameworks were used extensively by anthropologists, radical economists, and other social scientists in supporting their research and in their attempts to affect social change. I have found through the course of this research, however, that dependency and modernization offer only broad-based parameters with limited scope and applicability. Further, the Culture of Poverty has no foundation whatsoever, and indeed, reflects more stigma than anything else. Its use and applicability lies, however, in the fact that this framework alerted me to its continuing support among many who claim to be providers of "development assistance" to Canadian First Nations. The further usefulness of all three perspectives lies in the contribution to a cumulative body of knowledge regarding the causes and dynamics of the gap between the rich and the poor. As noted by Seligson (1993), "it can be said that research in this area provides one of the best illustrations of a cumulative social science that continually deepens its understanding of a complex problem." (Ibid:437). Part of this cumulative understanding demonstrated through my research is the contribution that can be made to development theory through understanding the basic premises of modernization, dependency, and the culture of poverty, and then adding to this understanding through the use of more reflexive, practical approaches such as Foucault's and Bourdieu's.

Power and Knowledge

Theory, as noted by Dreyfus and Rabinow (1983), Foucault (1980), and Rabinow (1986), only exists and is intelligible when it is set against and among particular cultural practices. These practices provide for the constraints on, and conditions for, the production of "truth" and the relation of "truth" to knowledge and power[176]. Within this context, both scientific objectivity and subjective intentions arise together and are analysed through relationships between truth, theory, values, and the social institutions and practices in which they emerge. A "regime of truth" (Rabinow 1986) then becomes an effective component in the constitution of social practices as "...truth is linked in a circular relation with systems of power which produce and sustain it, and to effects of power which it induces and which extend it"

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[176] Much of the work of Foucault pertains to the use of discourse in power/knowledge constructions. Discussion regarding the nature of discourse and discursive social practices is beyond the scope of this dissertation. For extensive discussion on the role of discursive social practices see Dreyfus and Rabinow (1983); Eribon (1991); Foucault (1971, 1973, 1980); Kritzman, ed. (1990); Macey (1993); and Rabinow (1986).

(Ibid: 240). Noted by Foucault (1980), Kritzman, ed (1990), and Rabinow (1986), power is not viewed as a possession that one group holds and another lacks. Power is not an institution, not a structure, not a strength we are endowed with, but is defined as "the name that one attributes to a complex strategical relationship in a particular society" (Dreyfus and Rabinow 1983:187). Knowledge is not seen as objective or subjective. The role that both power and knowledge play in the transformation of various regimes of power and truth is of particular applicability in the development of resource management regimes as these regimes are based on and impacted by: stakeholders' views of their realities; the contents of multiple realities; the communication of these realities to others; and the power and knowledge inherent in these realities:

> ...power and knowledge imply one another. There is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations (Dreyfus and Rabinow 1983:115).

Another aspect that is useful both in the practice of applied anthropology and in my research is Foucault's point that self-referentiality is more than a device for establishing authority. It is part of the research methodology, as the problem of interpretation and representation is linked to a wide range of interrelated social and political practices that constitute the modern world - including the world of the researcher. Dreyfus and Rabinow (1983) note that the meaning of interpretations is to be discovered in surface practices - not in mysterious depths where those features that are deemed the most "hidden" are not hidden at all. When viewed from the right distance and with the right vision, "there is a profound visibility to everything" (Ibid:107).

Reflexivity and Capital

There are two aspects of Bourdieu's work that are directly relevant to this research: interactions between the anthropologist and those with whom she is working; and the notion of symbolic capital in social and economic interaction[177].

Part of the research process of the applied/development anthropologist is finding a place in the cultures of others and also finding a place in the home culture[178]. Both processes include the recognition that the anthropologist is not an integral part of the culture being studied, and that all observations and processes are subject to the interpretation of the individual. Bourdieu (1986, 1993) and Rabinow (1986) note that both the anthropologist and informant are interpreting the meaning of everyday life, thereby bringing problems of representation to the forefront as "representations...serve as means for making sense of life worlds...and consequently they differ in their functions" (Rabinow 1986:257). The goals of the anthropologist and informant are distinct. As such, the anthropologist must ask herself questions about the context within which she finds herself and the position from which she is writing and, as a result:

> ...must make a break with not only native experience and the native representation of that experience. There must be a second break with questioning the presuppositions inherent in the position of an outside observer who, in his preoccupation with interpreting practices, is inclined to inject the principles of his relation to the object (Bourdieu 1986:2).

To avoid charges of self-indulgence and demonstrate the need for reflexive interpretation, Bourdieu notes that social science appears to oscillate between objectivism and subjectivism. Objectivism treats social phenomenon as things while, on the other hand, subjectivism can "...reduce the social world to the representations that agents make of it...producing an 'account of the accounts' produced by social subjects" (Bourdieu 1990:124). The question, then, becomes one of understanding the interactions of both subjectivism and objectivism. A reflexive approach provides an analytical approach to these two apparently irreconcilable perspectives, through the recognition of symbolic and economic capital.

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[177] Bourdieu's work, as with Foucault's, is exhaustive. Anything but a very limited examination of Bourdieu's analytical frameworks is beyond the scope of this dissertation. For extensive discussion see: Bourdieu (1986, 1988, 1990, 1993); Bourdieu and Wacquant (1992); and Calhoun, LiPuma and Postone, eds (1993).

[178] These processes have been discussed extensively in the anthropological literature. Those I have found useful, as well as interesting, include: Barley (1983); Bourdieu (1981); Briggs (1986); Clifton (1992); Dwyer-Shick (1992); Flinn (1990); Freedman (1986); Gearing (1970a); Geertz (1988, 1995); Golde (1986); Goodenough (1992); Heggenboughen (1992); Keesing (1992); Lederman (1986); Lindstrom (1990); Medicine (1978); Messerschmidt (1981); Van Maanen (1988); Weidman (1986); and Wolcott (1981).

Bourdieu (1986; 1988; 1990; 1993), Li Puma (1983) and Rabinow (1986) note the importance of "power" as a form of symbolic capital. Considerable labour is devoted to making and maintaining relations through symbolic investments - whether these relations are between First Nations, government, and industry or between academic faculties of universities[179]. The concept and reality of symbolic capital (the "objective") is less easily measured than that of economic capital (the "subjective"). Symbolic capital is, however, observed easily in the relationships of those who have accumulated symbolic capital (such as the Chief of a First Nation or Elders Advisory Council) and their relationship with others. Bourdieu (1986) notes that collective pressure of the community (in my research, Whitefish Lake), is critical in that the "wealthy" members of the group draw from this pressure not only their strength and political power, but their capacity to mobilize the group for or against individuals or groups. This is particularly critical in the development of cooperative/partnership management schemes. Also important are the obligations of symbolic capital on the part of the anthropologist. Bourdieu (1986) and others note that economic capital may only be accumulated in the form of symbolic capital. An Aboriginal chief, for example, is indeed a "tribal banker" amassing goods and/or services to eventually repay to others. This builds up a capital of obligations and debts which will be repaid in the form of respect, work, loyalty, and other benefits. This system cannot succeed without the support of the entire group:

> The endless reconversion of economic capital into symbolic capital, at the cost of a wastage of social energy which is the condition for the

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[179] This relationship is demonstrated clearly and in a thought-provoking manner in Bourdieu's publication entitled *Homo Academicus* (1988). This was followed with the publication of *In Other Words* (1990), which is useful in understanding Bourdieu's perspective on fieldwork, ethnology, sociology, and reflexivity.

> permanence of domination, cannot succeed without the complicity of the whole group: the work of denial which is the source of social alchemy...is a collective undertaking (Ibid:195).

The Reconciliation of Theory and Practice

This research process has made me acutely aware of the tensions that exist between theory and practice, between academia and practice, and even between the Aboriginal theoretical past and present practice. Further, the process of this research has confirmed, in my mind at least, that insights are to be gained from theory as they are to be gained from practice. As was noted by Chambers (1985) in his thoughts on the Vietnam War Memorial, the meaning of theory is "in the making". Through this research, I have taken the concepts of modernization, dependence, the culture of poverty, reflexivity, and power/ knowledge and applied them to the pragmatic development of a co-operative resource management implementation plan. This plan is designed to lay the foundation for the process of co-operative forest management in the Province of Alberta. Whether successful management is an outcome is up to the people of Whitefish Lake First Nation and political will on the part of the provincial government. Either way, this research process has provided for the practical expression of theoretical principles.

Also important to this research process is the reality that as applied/development anthropologists, we learn not only from our current research endeavours, but from the works and lives of others before us - including academics and those with whom we work. This is true in both theoretical development/ application and applied anthropological practice, demonstrated particularly in the convergence of indigenous/transplanted institutions through Aboriginal-government resource management regimes. As Geertz notes, however:

> It is difficult to know what to do with the past. You can't live in it, no matter how much you may fantasize doing so, or how gravely nostalgic you grow remembering it. You can't foretell the future from it...things in the offing frequently don't arrive, things unhinted at frequently do. You can't...draw laws out of it universally applicable

> to social affairs, iron necessities determining measurable outcomes, though attempts to do so seems as unending as they are futile. And you can't...find eternal verities in it by which to resolve the incertitudes of everyday existence or quiet the paradoxes of public conduct; there are, indeed, no master plots. About the only thing it seems useful for...is perceiving, a bit less blankly, what is happening around one, reacting, a bit more intelligently, to what, in the event, swims into view (Ibid:166).

In my view, this research project has accomplished this goal. All parties to, and stakeholders of, the Memoranda of Agreement and Understanding now have a more solid foundation on which to build co-operative management processes. The Implementation Plan developed through this process does not, however, provide a "recipe book" approach to resource management; nor is it designed as a "master plot" to quiet unrest among Aboriginal people attempting to gain more control of the management of forest resources in particular, and of renewable resources generally. This Implementation Plan is, instead, constructed in such a way as to provide the parties with their own "roadmap" to guide their efforts. The reality of the outcome is in the making.

Postscript

Introduction

When I first began this research, I had intended to included a substantial component on gender issues in the co-operative management of renewable resources. As my research developed, however, I found that this was a separate research project entirely, owing to the complex nature of both gender issues and resource co-operative management. After discussion with the Chief and Council of Whitefish Lake, the Province of Alberta, and Tolko Industries Ltd. I made the decision that I needed to concentrate on the data collection necessary to reach some sort of agreement on co-operative management implementation. As the most critical phase of even hoping to achieve successful implementation is the relationship between the players within the stakeholder groups, the facilitation of implementation planning became my priority. It is noted that this decision was made with the support of the female members of the Elders Advisory Council of Whitefish Lake First Nation. The question now is "where do we go from here?"

There are a number of gender issues that have arisen through this research, which have been noted throughout the dissertation. There are also a number of fruitful paths than can be taken in future research considerations[180] to address gender issues, as Canadian Aboriginal people are gaining access to resources and participation in the management of natural resources through a variety of mechanisms. It is, therefore, necessary to examine these gender issues in order to arrive at satisfactory, integrated approaches to resource management that reflect the preferences of all community members.

My preliminary research in Whitefish Lake and elsewhere demonstrates that

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[180] The Chief of Whitefish Lake approached me to discuss undertaking a research project that would facilitate more involvement of the women in resource management. As he stated, "I don't usually talk to the women about forest management or resource management". The community Elders Advisory Council is supportive of further research and has a number of projects it would like to see undertaken pertaining to gender, such as the role of women in the provision of support functions to the forest industry. Owing to time constraints, I have not verified the efficacy of these projects with other members of the community.

Aboriginal women are not, for the most part, encouraged or supported in their efforts to undertake direct involvement in natural resource management and implementation of management structures. This lack of participation is compounded by the fact that there exists a shortage of empirical knowledge of the factors that affect management structures at the local level, and the implications of gendered knowledge for implementation. Given relationships of power, of authority, and of decision-making currently in operation generally in Aboriginal communities and the subsequent limitation of women's participation in decision-making, the further conduct of research applicable to resource management and decision-making is critical to the long-term success of resource management.

There is an extensive body of theory that can be used to conduct gender research in a number of areas such as the analyses of practical and strategic gender needs (Moser 1989, 1993); household analyses (Blumberg 1991; Dwyer and Bruce 1988); post-modernist and/or feminist frameworks (di Leonardo 1991; Hekman 1990; Sanday and Goodenough 1990; Stanley and Wise 1990); and the relationship of gender to modernization and dependency theory, noted previously in this dissertation (Scott 1996). My primary interests at this time, however, concern: the applicability and development of methodological theory that provides a roadmap to researching gender issues in forest resource co-management, co-operative management, and joint management processes; gender differences in held values and connections to decision-makers and decisions regarding the use and management of natural resources; and the use of traditional ecological knowledge in forest management processes, specifically women's knowledge. These are discussed briefly.

Methodological Theory

Epistemic Responsibility in the Study of Gender and Social Forestry

Code (1987, 1991) is concerned with self-critical and socially responsible ways of posing epistemological questions of gender through issues of method and field perception. Ethnographic writing is viewed as the portrayal of what we as anthropologists know, or think we know, as "each cognitive agent" (1987:100). Particular capacities and inclinations on the part of the individual researcher are not transitory, which is reflected in the actual construction of a gendered ethnography. What also must be taken into consideration in researching gendered knowledge in Aboriginal communities is that the sum total of communal knowledge at any point in history is a product of individual efforts to "tread an intricate path between a need to make sense of the world...and a need to understand it in a communally viable way" (1987:114).

Epistemologically, it is necessary to determine who in the community is to be trusted in matters of gendered knowledge and gendered belief as the success of the research is dependent upon some sort of tacit agreement between myself, as the researcher, and those who "hold" the knowledge as:

> We do seem to be able to accumulate knowledge about what reality is not, even though it is not clear how much we truly know what it is. The important point...is that knowledge and understanding are modes of interpreting experience. Reality, in so far as it can be understood at all, can be understood and interpreted only by cognitive agents in actual or possible situations (Ibid:135).

Used in conjunction with an awareness of epistemic responsibility, the work of Geertz (1983, 1988) is useful in providing a guideline for further research, as knowledge is viewed as the mutual production of a discourse between the researcher and respondent - co-operative "story-making" between the women with whom I am working and myself.

On Interpreting Gender Through Culture

While at times subject to criticisms of obscurity and for replacing understanding with an invisible authoritative voice (Crapanzano 1986:74-75), Geertz's work provides a framework for delving into the "understanding of understanding" (Geertz 1983). This framework relies on interpretations of native common sense in the construction of reality in an attempt to come to grips with the problem of interpretation - not only from the point of view of seeing others, but to see ourselves as others see us. The anthropologist cannot perceive what the respondent perceives. Subsequently, the searching out and analysis of symbolic forms - whereby women represent themselves to themselves and to one another - is critical as "how, given what we believe, must we act, and what, given how we act, must we believe?" Through an analysis of the beliefs and ideas held by women, the culturally-distant is made more clear and straightforward to the anthropologist as these beliefs and ideas are used as a way of understanding the social institutions and cultural formations that surround them and give them meaning. In turn, these beliefs and ideas centre around concepts of rules, regulations, behaviour, appropriateness, and correct understanding (Geertz 1983, 1988).

Another useful application of Geertz's analysis concerns the place of the "woman in the field" undertaking gender research as "the Written At and the Written About" are not infrequently the same person in a different frame of mind. This can, at times, be disconcerting as:

> Our own forms of life become strange customs of a strange people; those in some far-off land real or imagined, become expectable behaviour given the circumstances. There confounds Here. The Not Us (or Not-US) unnerves the Us (Geertz 1988:106).

This leaves us with one final issue: in undertaking gender research, we can only be trusted by showing more than one dimension of ourselves. We must recognize "two-way" knowing and commit to being known by the women we are working with. This facilitates a process of "unlocking" the information we are seeking, as others are invited to become engaged in the research process (personal communication, Eloise Murray, December 1995).

Gender Differences, Held Values, and Decision-Making

Human values are a consideration in all studies of culture. Held values, defined by Murray et al (1995) as those basic and enduring notions that influence specific modes of conduct or preferable end states in relation to other options, are central to considerations of gender in resource management structures, governance, and decision-making as held values differ significantly as a function of gender. Preliminary research carried out by myself and others (c.f. Adamowicz 1991; c.f. Adamowicz et al 1991, 1994) and Murray et al (1995) has indicated another factor complicating gendered value research: the invisibility of women in resource management in northern boreal forest Aboriginal communities.[181] The determination and applied examination of held values forms, therefore, an integral component to the development and implementation of this understanding.

The necessity for further research underlies the importance of attending to gender differences in the valuing of natural resources - particularly important in the determination and development of appropriate natural resource management regimes. It suggests also that if women and men have significantly different values, the mechanisms for input into the decision-making process within communities must also account for the views of both women and men. A more detailed focus on the impact of held values on governance and decision-making, from an applied perspective, is now required.

Further research will facilitate the participation of Aboriginal women in natural resource decision-making and management processes within what appear to be patriarchal governing structures. Noted by Braidotti et al (1994), it is not sufficient to simply let women into positions previously occupied by men to effect meaningful change. Change requires the redefinition of management structures in such a way as to make them less discriminatory not only for women, but ultimately for all people.

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[181] Bierhorst (1994) has pointed out that there are many gaps in knowledge regarding Aboriginal values and states that the difficulties in understanding environmental and resource management issues, from an Aboriginal perspective, are considerable.

Traditional Ecological Knowledge in Forest Management Practices: Women's Knowledge

There appears to be a growing interest within anthropology in the indigenous knowledge systems of women in environmental and resource management for primarily two reasons: an eco-feminist view of the view of the world and the women in it; and the desire of women to participate more meaningfully in Aboriginal resource management and decision-making. The view put forward by eco-feminists such as Shiva (1991) who appear to assume women are somehow "closer" to the actual resource being managed and that women possess an intimate knowledge of both the resource and human environment, is not supported in Whitefish Lake. My own reluctance to accept this as a viable analysis is supported by Fernandez (1994) and Mishra (1994) as research demonstrates that women are no more closer to the environment that men are - the knowledge held is simply different.

Traditional ecological knowledge is structured by classification systems, sets of empirical observations about the environment, and systems of management pertaining to resource use. It is noted by Appleton (1994), Fernandez (1994) and Mishra (1994) that these systems are, by their very nature, "gendered" as specific spheres of activity are the specialized domain of different genders. Berlin (1992) points this out in his research regarding ethnobotanical/ethnobiological classification:

> ...statements that "men know more about the forest than do women" or that "the old guys are the wisest", with no subsequent documentation, is little better than journalistic reporting. In this regard, part of the goal of a general description is to show where cognitive variation exists and, having done so, provide some explanation for it (Ibid:206).

This is further noted by Norem (1988):

> ...just as some knowledge is unique to women, so are there predominantly male domains of knowledge. Because knowledge is part of the social fabric in which people live, and gender is one of the primary dimensions of social fabric, the study of indigenous knowledge systems must include gender as a factor (Ibid:7).

Understanding traditional ecological knowledge systems involves being cognizant of gender differences in who knows what and who controls what - factors that are crucial to the understanding of gendered knowledge and to the facilitation of women's participation in decision-making[182]. The recognition of the importance of gendered ecological knowledge to the development of forestry management regimes that empower women is valuable and is noted by Messerschmidt (1990):

> ...it is the contextual knowledge that local people bring to topics like trees, forests or farm forestry. This is critical stuff for anthropologists who place so much stake in the concept of culture...we seek to find out what people perceive, believe, know and ultimately say and do about the soils, water, plants, animals, trees and forests in their environment. And given women's tradition in harvesting the forest in many societies, their knowledge is particularly important (Ibid:13-14).

Conclusion

It has been noted in Chapter 3 that social forestry is operationalized most effectively as a term which links local people with forest, trees, and the products to be derived from them. It must be understood, however, that trees and tree products are embedded in complex resource and social systems, as noted by Arnold (1991). The design for change must begin with an understanding of the constraints on traditional management and the organizational/structural requirement for establishing new management systems. There exists, however, little understanding of the constraints on traditional boreal forest management and the organizational requirements for establishing new management systems. Further, as the held values of women and men have not been considered, the development of appropriate management systems is hindered even more. This underlies the need for development of management alternatives that include women in a meaningful way.

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[182] These issues are noted by Fortmann (1993) in the context of Zimbabwe forest management.

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APPENDIX A

WHITEFISH LAKE FIRST NATION

MEMORANDUM OF AGREEMENT made this 12 day of December, 1994

BETWEEN:

HER MAJESTY THE QUEEN in right of the Province of Alberta, as represented by the Minister of Environmental Protection (hereinafter referred to as the "Minister"),
OF THE FIRST PART
and

THE CHIEF AND COUNCIL OF THE WHITEFISH LAKE FIRST NATION
OF THE SECOND PART

WHEREAS the Minister desires to provide for the utilization of the deciduous timber resource of Township 80 Range 9 to 11, Township 81 Range 9 to 11, Township 82 Range 10 to 12, west of the 5th meridian.

THEREFORE in consideration of the premises and covenants herein the parties agree as follows:

A. FIBRE SUPPLY PROVIDED BY THE MINISTER

1. Deciduous timber permits (DTPs) in forest management unit (FMU) S9.
DTPs will be issued for a period of seven years, ending in the timber year 2001, to the Whitefish Lake Development Corporation or other legal entity ("Whitefish") established by Whitefish Lake First Nation to conduct forestry operations.

The amount of available annual allowable cut (AAC) from the deciduous stands in the S9 FMU is set at 50 000 cubic meters (m^3), except where immediate downward adjustment is made by the Minister during the quadrant due to drastic depletion of the applicable growing stock by fire or other destructive causes.

The AAC to be harvested by DTP is the pure deciduous component of the agreement area, comprised of both Trembling aspen and Balsam Poplar, and the incidental deciduous volume generated from the harvest of coniferous and mixedwood stands. Failure to harvest and fully utilize the Balsam Poplar component of the agreed wood supply will result in a reduction of the 14 000 m^3 AAC. No rights are implied by this Agreement to the incidental conifer that will be generated by the harvest operation of the DTPs.

The Minister shall provide Whitefish with volumes of deciduous timber by way of non-competitive DTPs to be issued on a one-year renewable basis and will provide an average of 50 000 m^3 annually.

For the first quadrant (two year period) ending March 31, 1996, the total volume granted by

DTPs to Whitefish will not exceed 100 000 m^3. During the second quadrant, from April 1, 1996 to March 31, 2001, the production granted by DTPs to Whitefish will not exceed 250 000 m^3. Carry over of uncut volume from quadrant to quadrant will not be permitted.

Fish and Wildlife and Lands and Forest Services will work together with the Whitefish Lake First Nation to provide guidance in long range wildlife management and timber management to arrive at a long range resource management plan for the agreement area.

This Agreement gives no control or rights over land or mineral resources in the agreement area.

2. Stumpage Rate

Whitefish will pay the regulation rate of dues applicable for deciduous timber species harvested under the non-competitive DTPs.

3. Renewal

At the end of this Agreement the Minister will review this Agreement and the feasibility of renewing it, based on an assessment of the original objectives and the Whitefish Lake First Nation's desire to continue. Assessment will include a review of Whitefish's success in conducting operations consistent with the Alberta Timber Harvest Planning and Operating Ground Rules, and the Forests Act and the Public Lands Act and the regulations under those Acts.

B. WHITEFISH LAKE FIRST NATION COMMITMENTS

1. Objectives

The Whitefish Lake First Nation agrees to meet the objectives of the deciduous timber resource utilization/habitat development project through:

Being involved in timber harvest planning to meet the objectives of wildlife management consistent with the memorandum of understanding of the Whitefish Lake First Nation land claim.

Committing to utilize the deciduous timber resource.

Providing for the development of local contractor entrepreneurs.

Providing training experience and employment to the local people during the harvesting of the timber available.

Operating within the standards specified in the Alberta Timber Harvest Planning Operating Ground Rules and within the conditions of approval for the DTPs.

Integrating harvest plans with the coniferous quota holder, Zeidler Forest Products Ltd., detailing the utilization of the coniferous resource on the DTPs.

IN WITNESS WHEREOF the party of the first part executes this Agreement under the hand of the Minister subscribed hereunder and the party of the second part executes this Agreement by subscribing hereunder the signatures of its duly authorized corporate officers this 12 day of December, 1994.

Memorandum of Understanding

Between

The Whitefish Lake First Nation
and
The Government of the Province of Alberta

Pursuant to the memorandum of intent regarding the Whitefish Lake Treaty Land Entitlement Claim, the parties hereby agree to a process of cooperative management on natural resource matters in areas within Forest Management Unit S-9 (F.M.U. S-9). Cooperative management is hereby defined as a process of consultation and cooperation on matters of mutual interest.

The parties agree that nothing in this agreement, or resulting from this agreement, is intended to abrogate or derogate from any aboriginal or treaty rights referred to in Section 35 of the Constitution Act, 1982.

The parties acknowledge and agree that nothing in this agreement, or any subsequent agreement signed as a result of it, shall be construed as limiting the Government of Alberta in the exercise of its legislative and regulatory jurisdiction over matters in relation to natural resources.

Objectives of the Agreement

1) Develop a process of mutual cooperation and consultation on natural resource matters in areas of F.M.U. S-9 in order to attempt to resolve issues of concern.

2) As a first priority, the parties will initially undertake a process to:

    i) secure for the Whitefish Lake First Nation, or some wholly owned corporate entity, a Deciduous Timber Permit in F.M.U. S-9 of not less than 50,000 cubic metres per year for a period of not less than five years commencing in 1994.

    ii) attempt to secure employment and business opportunities and other socio-economic benefits to Whitefish Lake First Nation members from the remainder of the deciduous timber allocation in F.M.U. S-9, through consultation with private sector companies in the area.

    iii) secure for members of the Whitefish Lake First Nation a portion of the commercial fishery allocation in the lakes within F.M.U. S-9.

3. Additional processes will be initiated to attempt to address other natural resource matters which are jointly identified by the Steering Committee described below.

Steering Committee

- A Whitefish Lake First Nation - Province of Alberta Steering Committee shall be established to undertake consultation regarding the objectives of this agreement. Working sub-committees will be established to deal with specific issues.

- The Steering Committee shall be responsible for identifying key resource management issues and areas of concern; for establishing processes to address these key issues; and for recommending processes to resolve issues, including development of recommendations for policy interpretations or changes in policy that may be required to achieve the objectives of this agreement.

- The Steering Committee shall consist of the Assistant Depute Minister of Land and Forest Services, Assistant Deputy Minister of Natural Resources Services, a senior representative of Alberta Aboriginal Affairs and representatives from the Whitefish Lake First Nation. Other representatives may attend to address specific issues.

- The Committee will meet on a monthly basis or as required to address the objectives of the agreement and provide appropriate documentation.

Dated, this 12th day of December 1994

APPENDIX B

MEMORANDUM OF INTENT

On November 25, 1988, the negotiators representing Alberta, Canada, and the Whitefish Lake Indian Band agreed to submit the following tentative settlement proposal to their respective principals for their consideration.

1. RESERVE LAND

Subject to third party interests being satisfied in a manner acceptable to Canada, Alberta and the Band, Alberta agrees to transfer to Canada, for establishment as Indian Reserves, 5500 acres more or less, including mines and minerals, such lands to be selected by the Band from land made available for that purpose by Alberta.

2. CASH PAYMENT

(a) Canada agrees to pay to the Band 8.333 million dollars and Alberta agrees to pay to Canada, or its designate, 10.833 million dollars on the execution of the final agreements subject to the appropriation of funds by Parliament and the Legislature of Alberta for this purpose;

(b) The use and allocation of the funds received by the Band pursuant to Clause 2(a) shall be set out in the final settlement agreement between Canada and the Band; and,

(c) The cash payments made pursuant to paragraph (a) are not made in substitution or replacement of any funds available to the Band from any existing or future programs of Canada or Alberta.

3. RELEASES

The Band agrees to provide Canada will full and final release for any obligations to provide further reserve lands or land in severalty pursuant to the terms of Treaty #8. Canada agrees to provide Alberta with a full and final release from any obligations under the Constitution Act 1930 to provide further lands to Canada for the purposes of setting aside reserves or lands in severalty for the Band or its members. The Band agrees to provide Alberta with a full and final release for any and all land entitlement claims.

4. NEGOTIATING COSTS

(a) Canada agrees to reimburse the Band for all reasonable negotiation costs, including consulting fees and related travel costs, and including Band Council negotiators and related travel costs. Legal fees and disbursements are subject to the approval of the Department of Justice; and,

(b) The total amount of these costs are subject to further identification by the Band and review by Canada.

RATIFICATION

This memorandum of Intent is subject to Alberta, Canada and the Band:

(a) Entering into such final agreements as are necessary to formalize the intent and terms of the settlement as reflected in this Memorandum; and,

(b) Ratifying the terms of the final agreements by obtaining appropriate governmental authority or approval from both Canada and Alberta and by obtaining approval by way of a referendum by the Whitefish Lake Band.

NEGOTIATOR FOR THE GOVERNMENT
OF ALBERTA
John McCarthy

NEGOTIATOR FOR THE GOVERNMENT
OF CANADA
Rem Westland

NEGOTIATOR FOR THE WHITEFISH
LAKE BAND OF INDIANS SETTLEMENT
AGREEMENT
Eddie Tallman

Other items upon which the parties are agreed but which will not form part of the final agreements pursuant to paragraph 5(a) and (b):

(a) Reserve Survey

Canada shall pay for all costs of surveying reserve lands required for the purposes of the agreement. Canada shall complete the survey as soon as possible after the execution of the agreement.

(b) Wildlife and Fisheries Management

Alberta and the Band agree to enter into discussions on cooperative approaches to wildlife and fisheries management in an area surrounding the Band's reserves.

(c) Additional Lands

Provided that Canada's reserve creation and addition criteria can be met:

(i) Canada agrees to the addition of the following lands into the Whitefish Lake Indian Reserve #155:

ALL THAT PORTION OF TOWNSHIP EIGHTY (80) RANGE ELEVEN (11) WEST OF THE FIFTH MERIDIAN, LYING WITHIN THE BOUNDARIES OF UTIKOOMAK INDIAN RESERVE NO. 155 AND BEING MORE PARTICULARLY SHOWN OUTLINED IN RED AND DESIGNATED H.B. CO AS SHOWN ON A PLAN OF SURVEY OF SAID INDIAN RESERVE, AS SURVEYED BY J.L. REID, DOMINION LAND SURVEYOR, A.D. 1908, CONTAINING 7.85 HECTARES (19.40 ACRES) MORE OR LESS:

(ii) The Whitefish Lake Band Development Corporation agrees to transfer to Canada, for incorporation into Whitefish Lake Indian Reserve #155, surface title to the said lands; and,

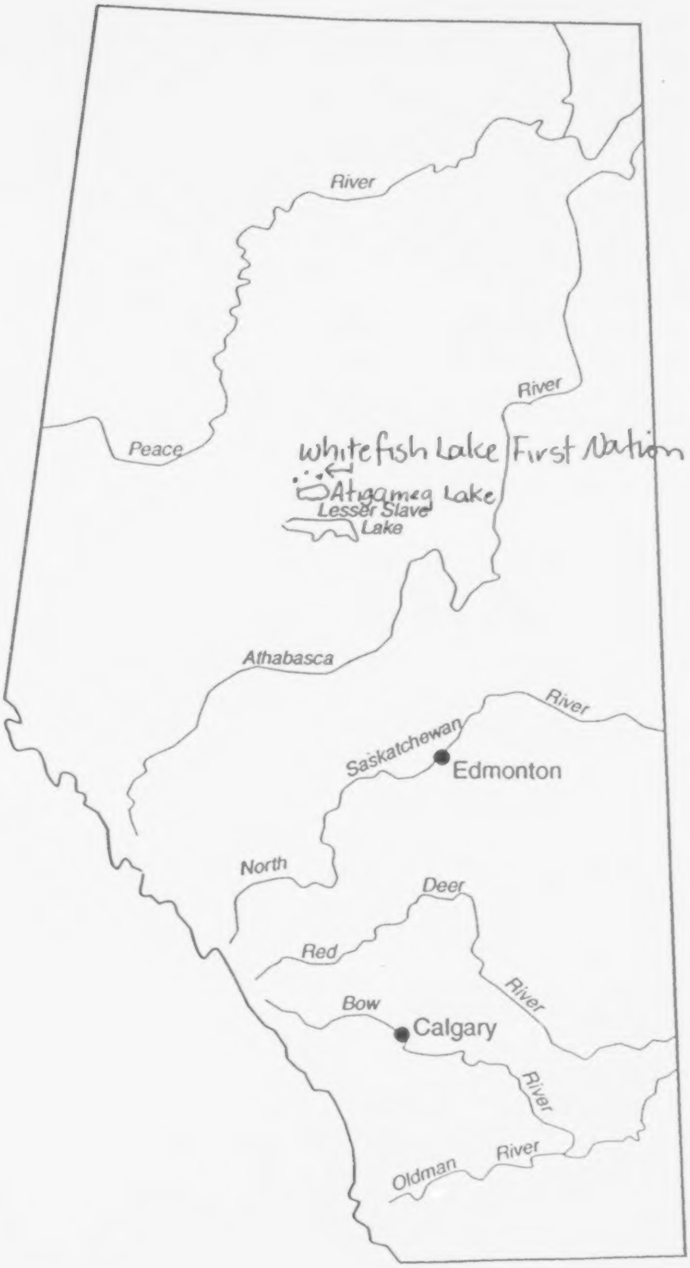
(iii) Alberta agrees to transfer to Canada, for incorporation into Whitefish Lake Indian Reserve #155, title to those minerals currently owned by Alberta in the said lands.

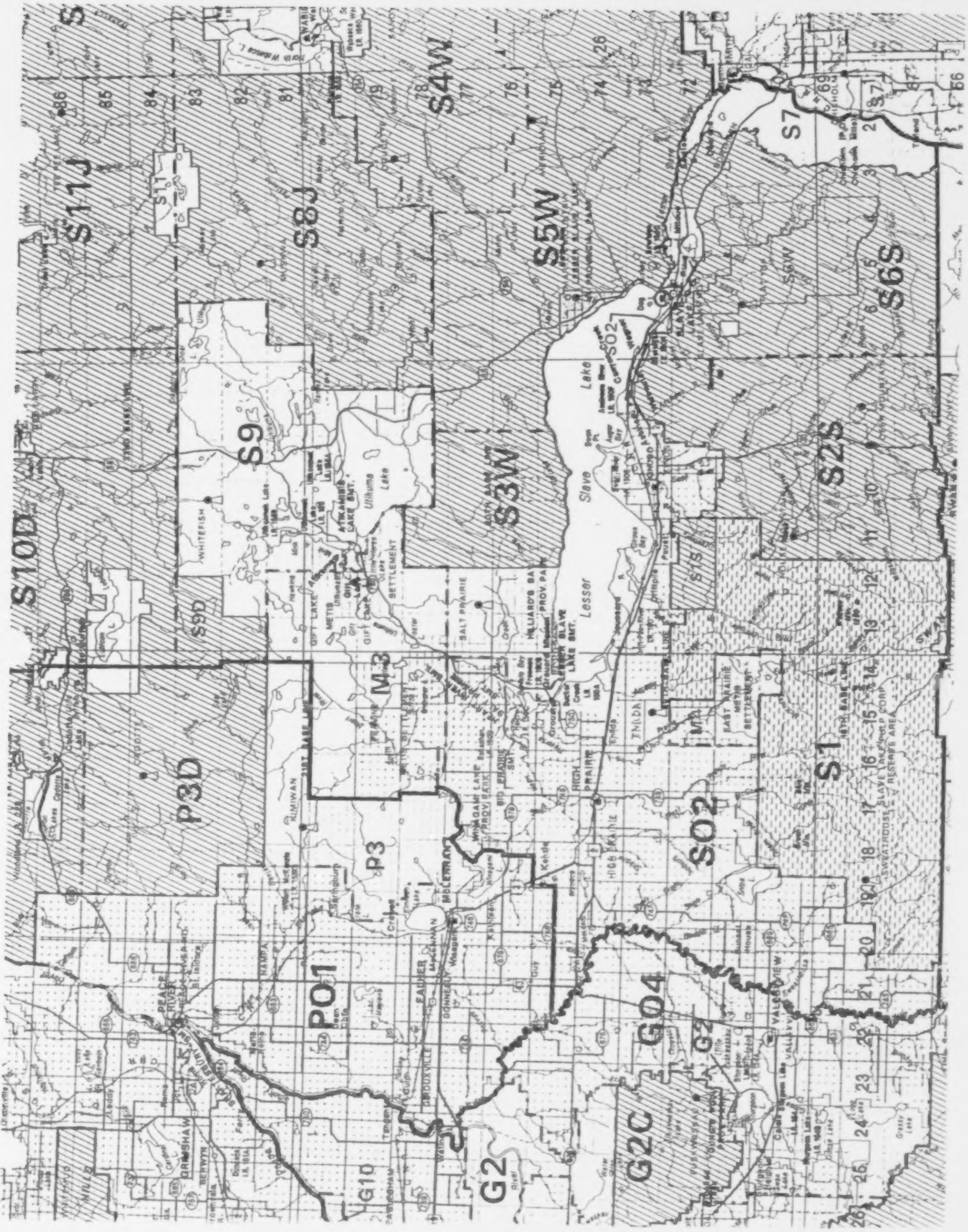
(d) Nothing in the final agreements will affect the availability or level of funding provided to the Band under existing and future federal and provincial programs available to Indian Bands.

(e) Subject to the Memorandum of Intent and in particular paragraph 3 thereof, nothing in the final agreements will affect any other existing Treaty rights of the Band.

APPENDIX C

WHITEFISH LAKE BAND
AREA MAP AND FOREST INVENTORY


River
River
Peace
Whitefish Lake First Nation
Atigameg Lake
Lesser Slave
Lake
Athabasca
River
Saskatchewan
Edmonton
North
Deer
Red
River
Bow
Calgary
River
Oldman
River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S11J
S11
S8J
S4W
S5W
S3W
S9
S9D
P3D
P3
M3
PO1
G04
G2C
G2
G10
SO2
S1
S15
S2S
S6W
S6S
S7
Slave
Lake
Lesser
Utikuma
Lake
WHITEFISH
KIMIWAN
HIGH
PRAIRIE
PEACE
RIVER
GRIMSHAW
MCLENNAN
FALHER
DONNELLY
VALLEYVIEW
SALT PRAIRIE
GIFT LAKE
EAST PRAIRIE METIS SETTLEMENT
SWAN RIVER

APPENDIX D
Tree and Plant Associations

Forest Inventory Report
Whitefish Lake Band
IR 155, 155A, 155B

The following are typical overstorey and understorey species for the Mid Boreal Mixedwood Ecoregion within which the Whitefish Lake Band Lies

Tree Species

Aspen	*Populus tremuloides*
Balsam Poplar	*Populus balsamifera*
White Birch	*Betula paperifera*
Lodgepole Pine	*Pinus contorta* var *latifolia*
Jack Pine	*Pinus banksiana*
White Spruce	*Picea glauca*
Black Spruce	*Picea mariana*
Tamarack	*Larix laricina*
Balsam Fir	*Abies balsamea*

Understorey Species

Alder	*Alnus* spp.
Rose	*Rosa* spp.
Fireweed	*Epilobium angustifolium*
Dewberry	*Rubus pubescens*
Wild Sarsaparilla	*Aralia nudicaulis*
Willow	*Salix* spp.
Peavine	*Lathyrus ochroleucus*
Bog Cranberry	*Vaccinium vitis-idaea*
Twinflower	*Linnaea borealis*
Blueberry	*Vaccinium myrtilloides*
Labrador Tea	*Ledum groenlandicum*
Bunchberry	*Cornus canadensis*
Bearberry	*Arctostaphylos uva-ursi*
Buffaloberry	*Shepherdia canadensis*
Mooseberry	*Virburnum edule*
Vetch	*Vicia americana*
Northern Bedstraw	*Galium boreale*
Common Pink Wintergreen	*Pyrola asarifolia*
Aster	*Aster* spp.
Honeysuckle	*Lonicera involucrata*
Soloman's Seal	*Smiliciana* spp.
Horsetail	*Equisetum* spp.
Dwarf Birch	*Betula glandulosa*
Strawberry	*Fragaria virginiana*
Palmate-leaved Coltsfoot	*Petasites palmatus*
Feathermoss	*Pleurozium* spp.
Stairstep Moss	*Hylocomium* spp.

Knight's Plume	*Ptilium* spp.
Shagnum	*Sphagnum* spp.
Brown Moss	*Temonthypnum* spp.
Fescue	*Festuca* spp.
Brome	*Bromus* spp.
Wheat Grass	*Agropyron* spp.
Bluegrass	*Poa* spp.
Wild Rye	*Elymus innovatus*
Sedge	*Carex* spp.
June Grass	*Koleria cristata*
Spear Grass	*Stipa comata*
Three-flowered Aven	*Geum triflorum*
Sticky Geranium	*Geranium viscosissimum*
Cinquefoil	*Potentilla* spp.
Saskatoon	*Amelanchier alnifolia*
Buckbrush	*Symphoricarpos occidentalis*
Snowberry	*Symphoricarpos alba*
Silberberry	*Elaegnus commutata*
Red Osier Dogwood	*Cornus stolonifera*
Reed Grass	*Calamagrostis* spp.

Strong and Leggat described the ecological conditions of the various ecoregions in Ecoregions of Alberta (1992). The Whitefish Band falls in the following ecoregion:

- Mid Boreal Mixedwood - The modal community of this ecoregion is stands of aspen and balsam poplar, associated with rose, fireweed, bunchberry and wild sarsaprilla. Balsam poplar is more common on imperfectly drained sites. Successional stands of white spruce and balsam fir are less common due to the prevalence of forest fires. Black spruce dominates on poorly drained sites and is associated with willows and sedges. Jack/lodgepole pine prevail on well to rapidly drained sites and may be associated with blueberry and common bearberry.

APPENDIX E

Alberta Timber Harvest Planning and Operating Ground Rules
Alberta Environmental Protection 1994

4.0 TIMBER HARVESTING AND INTEGRATED RESOURCES MANAGEMENT

4.1 Integrated Resource Management

In Alberta, forests are managed for timber production and their many other resources and values. Forest managers must consider the impact of logging on other resources and forest users when they plan and conduct harvest operations. Integrated planning in cooperation with all stakeholders can yield a variety of benefits for many people.

4.2 Integrating Timber Harvesting with Other Resources

OBJECTIVE: To plan and conduct timber harvesting according to:

- **a. the principle of integrated resource management, recognizing and considering other resources uses and values;**
- **b. integrated resource plans for those area of the province covered by such plans; and**
- **c. the guidelines specified in the Policy for Resource Management of the Eastern Slopes Revised 1984 (ENR Publication T/38) for those areas of the Eastern Slopes covered by the policy.**

STANDARDS:

1. Land and Forest Services shall refer cruise reports both in-service and to other resource agencies to review before a timber disposition is issued. The information gathered from this referral shall be included with that stand assessment information and given to the timber operator to use in developing his AOP.

2. Land and Forest Services shall refer General Development Plans (GDPs) and AOPs to the Fish and Wildlife Habitat Biologist/Technician and to those provincial government agencies that expressed interest in the logging plans during the previous referral.

GUIDELINE:

1. Before the preliminary AOP is prepared, the timber operator should consult with registered trappers, holders of grazing dispositions, recreation and tourism operators, private property owners, industrial operators and any other affected group in or near the proposed harvest area. Timber harvest operators should maintain contact with these people during the development of harvest plans to ensure their concerns are being addressed appropriately.

4.3 Managing Fish and Wildlife Habitat in Timber Harvest Operations

4.3.1 Fish and Wildlife Habitat Management Zones

OBJECTIVE: **To establish areas where the application of specific operating standards and guidelines will assist timber operators in meeting fish and wildlife habitat objectives.**

STANDARD:

1. The Habitat Biologist/Technician will identify and explain fish and wildlife habitat management zones for the Forest Management Plan of each Forest Management Unit before zones other than the General Fish and Wildlife Habitat maintenance zone can be applied at a disposition level. Zones may be revised for the cruise report.

GUIDELINE:

1. Special operating conditions may be applied to specific zones in addition to the standards and guidelines identified in these ground rules.

4.3.2. General Fish and Wildlife Habitat Maintenance Zone

OBJECTIVE: **To develop harvest designs and conduct harvest operations in ways that will:**

- **a.** **encourage richness of wildlife species by maintaining or enhancing habitat diversity;**
- **b.** **manage for a well-distributed habitat capable of providing long-term population viability for all seasonal and year-round resident wildlife species;**
- **c.** **ensure that forest management activities maintain the capability for wildlife use of habitat;and**
- **d.** **protect fish habitat.**

STANDARDS:

1. Instream activities in fish-bearing watercourses shall be scheduled to avoid migration, spawning and incubation periods of resident fish species. Instream work must be carried out in a manner that avoids stream sedimentation.

2. The capability for upstream fish passage must be maintained when any road crossing is built over a fish-bearing watercourse.

3. In fish-bearing watercourses, any negative impacts on the stability and fish habitat values of streambanks must be minimized. Where streambanks are damaged, they must be reclaimed using techniques approved by Alberta Fish and Wildlife Services.

Other standards and guidelines that apply to the protection of fish habitat are found in subsections 3.2, 3.3 and 3.4.3.

GUIDELINES:

1. Mature/overmature forest provides habitat for numerous species of wildlife and contributes to the biodiversity of the forest. A minimum of 10 percent of the gross productive forest land base of each forest management unit (FMU) should be managed as mature/overmature forest that is representative of stand types in the area. Unmerchantable stands, watercourse

protection buffers and other areas not scheduled for harvest may contribute to the 10 percent. Where special wildlife management objectives require more than 10 percent mature/overmature forest, such areas will be identified in the Forest Management Plan or the cruise report. Proposals by Alberta Fish and Wildlife Services to manage more than 10 percent of an area as mature/overmature forest should be justified based on management objectives for wildlife species associated with older forests.

The stands managed as overmature/mature should be distributed throughout the disposition and be of a variety of sizes from 4 ha or larger; large patches are preferred. The amount and distribution of overmature/mature timber in a particular disposition should be arrived at by the Land and Forest Services and Alberta Fish and Wildlife, in consultation with the timber operator, at the cruise report stage.

2. In deciduous timber dispositions where there are no coniferous stands suitable for providing winter thermal cover over large areas, special effort will be made to developing future thermal cover through understory protection where such understories exist.

3. Using the following guidelines, timber operators should design, construct and manage their roads to minimize the impact of fish and wildlife.

    a. Roads and trails should be constructed away from important wildlife habitat areas, including reproductive habitat for select management species, key features such as mineral licks, and important feeding habitats and watering sites.
    b. In designated areas, road construction and hauling activities should avoid critical wintering, breeding and birthing periods when populations may be more vulnerable to sensory disturbance and harassment.
    c. In designated areas, the Forest Superintendent may request timber operators to restrict road access during specified periods, implemented in accordance with departmental policy. Road access in some key habitats should be removed after all operations have been completed.
    d. Cutblock access roads should be managed to minimize the secondary impacts of vehicle access (e.g., hunting pressure, poaching and animal harassment). Roads may be closed by removing stream crossings, rolling back slash, roots and other logging debris on portion of the ROW's scarifying and planting, or other similar techniques.

4. Cutblocks and clearings beside long-term roads should be managed to minimize the line-of-sight.

5. In cutblocks, the distance to winter hiding cover should not exceed 200 m. Cutblocks where the distance to cover is 150 m to 200 m will be acceptable provided measures are taken to improve cutblocks for wildlife use (e.g., creating irregular edges, leaving residual stands in cutblocks, ensuring understories and leaving debris piles). Where these features are not provided within cutblocks, distances to hiding cover should not exceed 150 m.

6. The distance to winter thermal cover should be considered when designing cutblocks, especially during planning of subsequent harvest passes. Unmerchantable, deferred, isolated, inoperable or other timber cover not scheduled for harvest may provide adequate thermal cover. Where such cover is unavailable, timber stands that will provide thermal cover should be retained as required.

7. Timber operators should incorporate irregular and natural boundaries in their harvest layout

wherever possible, and limit the line of sight. Adjacent to roads that will be used five years or longer, the sight distance should be less than 400 m.

8. Wildlife travel corridors are required in well-defined valleys or along permanent streams and rivers. These should contain timber stands on the floodplain of well-developed valleys, and forested areas at the top of well-developed valley breaks. These corridors should be at least two "sight distances" in width to allow undisturbed movement of wildlife. Where the stream buffer provides adequate sight distance, no additional consideration is needed. Harvest designs may include selective harvest, narrow cutblocks, and other techniques designed to maintain or enhance travel corridors.

9. Dead standing trees and some live trees should be left for snag recruitment (8 per ha) in the cutblock to provide habitat, wherever this does not jeopardize worker safety. Large-diameter dead and selected live trees or unmerchantable species should be identified as a high priority for retention. Trees are preferred in a clumped distribution.

10. Scattered pieces of large woody debris (8 cm diameter and greater) should be retained within cutblocks for small mammal habitat.

11. Piles or large woody debris should be left within cutblocks to provide denning sites for furbearers and their prey species, and cover for small mammals and birds. The piles should be randomly located in the cutblocks (approximately 50 m apart). For fire protection, however, the piles should not be left within 8 m of cutblock edges.

12. Mineral licks, spacings that are frequented by wildlife, and water-source areas that are potentially significant for fish spawning and egg incubation should be protected. They should be identified on logging plans and mineral licks, and springs should be protected by a buffer with the width of one sight distance. When sites are encountered during harvest operations, specific prescriptions shall be applied incorporating procedures such as relocation of cutblock boundaries and retention of undisturbed vegetation buffers.

4.3.3 Ungulate Zone

OBJECTIVE: **To enhance habitat in important ungulate winter range and other key habitats that have relatively high ungulate populations when compared to surrounding areas in the Forest Management Unit.**

All standards and guidelines stated for the General Wildlife Habitat Maintenance Zone shall apply to the Ungulate Zone, in addition to the following standard and guidelines.

STANDARD:

1. The ungulate species and the area of concern shall be identified in the cruise report.

GUIDELINES:

1. A three-pass harvest pattern should be used to enhance moose and elk habitat. This will extend the availability of early successional vegetation for forage, and maintain thermal cover and snow-interception cover. Regeneration should be 10 m tall in first-pass cutblocks before third-pass cutblocks are approved for harvest. The objective is to have adequate and well-distributed thermal cover after the third pass; this may be achieved in some areas with unmerchantable stands. Normally, one third of the merchantable timber will be harvested in

each harvest pass.

In special situations (e.g., poor stand condition), cut proportions may be altered, if at least 20 percent of the merchantable timber is retained for the third pass. Distribution of mature stands after the second pass must allow for optimum use by ungulates. Other systems of forest management may be acceptable if ungulate habitat enhancement objectives are met.

2. To provide security and encourage use of cutblocks by ungulates, cutblock design should include vegetation management methods that will limit the line of sight adjacent to long-term roads (i.e., roads used five years or longer). This could be accomplished, for example, by using an offset layout with 100 m - 200 m wide cutblocks adjacent to roads.

3. Operations should be scheduled to avoid vehicle access and disturbance of ungulates during the critical late winter (January 1 to April 30). Operations that cannot be avoided during this time should minimize or localize access and disturbance through a low-impact strategy to be devised by the operator, Alberta Fish and Wildlife Services and Land and Forest Services.

4. In ungulate zones specified for elk, the distance to winter thermal cover should not exceed 300 m from any point in a cutblock.

5. In ungulate zones specified for mule deer, forest management prescriptions should be developed to retain suitably distributed stands for winter habitat.

4.3.4 Caribou Zone

OBJECTIVE: **To sustain or enhance caribou habitat in designated areas, and maintain the capability for caribou to use the habitat.**

STANDARD:

1. Logging shall be implemented according to the provincial guidelines for timber harvesting in caribou habitat. Management plans will identify special timber harvest strategies to guide the preparation of individual logging plans.

4.3.5 Floodplain Zone

OBJECTIVE: **To maintain or enhance fish and wildlife habitat along floodplains and stream and river valley bottoms.**

STANDARD:

1. Outside designated watercourse protection buffers, forest harvest proposals on floodplains must ensure fish habitat is protected and wildlife habitat is enhanced according to specified objectives.

GUIDELINES:

1. Selective harvesting and small cutblocks should be considered to help achieve specific fish and wildlife objectives.

2. Well-planned selective harvesting or small, multiple-pass cutblocks within larger stands should be considered in the floodplain zone, but only where thermal and snow-interception

cover and key habitat (e.g., snags, woody debris) are not jeopardized.

3. Small timber stands surrounded on at least three sides by meadows or shrublands should be maintained in a state of mature forest cover.

4.3.6 Special Wildlife Habitat Zone

OBJECTIVE: To provide a framework for the special management of special habitat for any wildlife species.

Examples of potential special wildlife areas include forests near trumpeter swan lakes, colonial nesting areas and habitat of rare, threatened and endangered species. It may also include the habitats of featured species as defined by Alberta Fish and Wildlife Services. Standards and guidelines will depend upon the particular wildlife species being managed and the circumstances of the site.

4.4 Integrating Timber Harvesting with Tourism, Recreation Resources and Protected Areas

OBJECTIVE: To minimize the impact of timber operations that occur near to recreational or tourism site developments and facilities and legislated protected areas.

STANDARD:

1. Timber operators shall plan and conduct their timber operation in consideration of legislated protected areas and approved recreation resource management plans, where they exist (e.g., lake-shore management plans, river corridor plans).

GUIDELINES:

1. Where possible, roads should avoid high-value recreation areas, or be built according to standards that will ensure they can be used safely while minimizing their impact on the recreation values of the area.
2. Roads should be clearly posted with appropriate traffic control and cautionary signs, particularly during periods of high recreational use (i.e., hunting season and summer) when timber harvesting or hauling operations are in progress.
3. Logging techniques that will minimize the visual impact of logging should be used near recreation areas.

4.5 Integration of Timber Harvesting with the Trapping Industry

OBJECTIVE: To minimize the impact of timber operations on the trapping opportunities within a Registered Trapping Area.

STANDARDS:

1. The timber operator shall make a reasonable effort to refer the GDP or supply information pertinent to a trapping area to senior partners of Registered Trapping Areas when they may be affected by proposed harvest operations. Normally, this shall occur five years before harvest operations begin. When requested, the timber operator shall provide the trapper with

the harvest design map immediately following the Department's approval of the operator's final AOP.

2. Timber operators shall advise trappers of impending activities at least 10 days before operations begin, preferably by personal contact. This will allow trappers time to remove equipment that may be lost or damaged by timber operations, or to reschedule trapping activities to reduce conflicts.

3. If known, locations of trapper cabins, trails and trapline, or other improvements will be shown on AOP maps.

4.6 Integrating Timber Harvesting with Domestic Grazing

OBJECTIVE: **To minimize the impact of timber operations on range resources and domestic grazing, and to protect improvements on public land.**

STANDARDS:

1. On grazing dispositions, timber operators shall consult with the grazing disposition holders to address specific concerns before operations begin.

2. During harvest, hauling, reforestation and reclamation operations, the timber operator shall ensure that any existing roads, bridges or improvements to active grazing dispositions are maintained.

3. The timber operator shall ensure that timber operations do not reduce the carrying capacity of the range for domestic livestock grazing.

4. Grazing disposition holders shall be advised by the timber operator at least 10 days before operations begin on timber dispositions affecting a grazing disposition.

GUIDELINE:

1. Where possible, timber operators should schedule operations in cooperation with grazing operators.

4.7 Integrating Timber Harvesting with Other Industrial Developments

OBJECTIVE: **To recover and use timber removed from industrial clearings, and to make use of common roads and campsite locations where timber harvesting is proposed near or on industrial developments (e.g., mine sites, oil and gas fields, oil sands development, and sand and gravel operations).**

STANDARD:

1. Timber operators shall use existing roads and campsites wherever it is feasible and safe..

GUIDELINES:

1. Timber operators should cooperate with industrial operators to maximize timber recovery from industrial clearings.

2. Timber operators should coordinate and integrate their road planning and construction with other resource industries to develop roads of acceptable standards to meet the needs of all users safely and efficiently. Integration may include road use agreements and should contain uniform environmental protection standards.

4.8 Managing Forest Aesthetics

OBJECTIVE: To minimize the impact of timber operations on the visual quality of the forest landscape.

STANDARD:

1. The manual, Forest Landscape Management Strategies for Alberta (Forestry, Lands and Wildlife Pub. No. T/228), shall be used to identify visual resources, their sensitivity and vulnerability, and to act as a guide for mitigating the aesthetic impact of timber harvesting.

GUIDELINES:

1. The potential visual impact of harvesting and reforestation activities within cutblocks located beside sensitive viewsheds and major travel corridors should be considered during harvest planning. Visual management practices should be incorporated into cutblock harvest plans to temper adverse visual impacts.

2. Landscape assessment maps for some major corridors are available from Land and Forest Services. The visual impact that logging has on the landscape should be considered for all areas identified as sensitive from these maps and other sources. Priority should be given to viewsheds from major travel corridors, recreation trails and watercourses, recreation areas, tourism facilities, municipalities, or any other area identified in the cruise report or Forest Management Plan.

3. Land and Forest Services will asses the visual sensitivity of the area covered by a disposition and provide the assessment to the timber operator in the cruise report. This should include vantage points of particular concern and identify local residents who may have an interest in the aesthetic aspects of the operation. With this information, the timber operator shall address their concerns and incorporate principles of aesthetic layout designs in the developing the AOP.

APPENDIX F

SAMPLE LOGGING CONTRACT

Canada-Alberta Partnership in Forestry Agreement
Forest Management Plan - Whitefish Lake First Nation
IR 155, 155A, 155B - March 16, 1994

The following contract is a sample format for your consideration. Note that a contract should be adapted to the particular requirements of each situation. In addition to the items addressed in the following sample contract, you may wish to provide for: Additional Work, Directions to the Contractor, Representations, Curtailment, Special Provisions, Insurance, Assignment and Subcontracting, Default by Contractor, Insolvency of Contractor, and Termination. You are advised to seek legal counsel regarding your contract documents.

SAMPLE LOGGING CONTRACT

THIS AGREEMENT made the ____ day of _________, 19 ____

BETWEEN

A.B. Cree
(herein called the "Owner")
OF THE FIRST PART

AND

XYZ Logging Ltd.
(hereinafter called the "Contractor")
OF THE SECOND PART

WHEREAS the Chief and Band Council's representative wishes to log all merchantable trees on the portion of District Lot 000 as described in Schedule "A" attached.

AND WHEREAS the Contractor has agreed to log the said area in accordance with the terms and conditions set forth in this Agreement.

NOW, THEREFORE, THIS INDENTURE WITNESSETH that the parties hereto agree, each with the other, as follows:

1. AREA

The Contractor will confine its logging to the area defined in Schedule "A" attached.

2. FIRE REGULATIONS

The Contractor agrees to observe all Provincial Government regulations relating to the safety and security in respect to fire or other hazard, and that during the fire or dry season, Apr. 15 - Oct. 15, unless otherwise specified by the Alberta Forest Service, it will take all precautions prescribed by the Forest Act or the regulations thereunder, or as may be specified by the Chief and Band Council's representative, and shall cease work if the Chief and Band Council's representative deems it necessary.

3. MERCHANTABLE TIMBER

The Contractor will cut and remove all trees and windfalls which will yield merchantable logs, defined as logs containing at least 50% sound wood and of greater than a minimum top diameter of 10 cm inside back and a minimum length of 5 metres. The Contractor is also required to fall all snags above 3 metres in height.

4. OWNERSHIP

All logs produced from the said area belong to the Chief and Band Council's representative.

5. SLASH DISPOSAL

The Contractor agrees that all slash or logging debris resulting from the Contractor's operations will be disposed of by the Contractor to the satisfaction of the representatives of the Alberta Forest Service and/or the Chief and Band Council's representative.

6. ROADS

The Contractor shall build at his own expense spur or skid roads necessary for logging, and shall maintain and repair, as necessary, all access roads used by the Contractor.

7. TIMING

Logging shall commence on _________, 19 _____ and shall be completed, including delivery of logs, by ____________, 19___. It is agreed that time is of the essence hereof.

8. DELIVERY

The Contractor will deliver all logs from the area to _______ (e.g., Acme Sawmills Ltd.), where the logs will be scaled by government licensed scalers. Both the Band and the Contractor will receive a copy of the scale record. The Chief and Band Council's representative will be responsible for the cost of scaling.

9. PAYMENT

The Chief and Band Council's representative agrees to pay the Contractor $ ______ per tonne for logs delivered to __________________ (e.g., Acme Sawmills Ltd.), for the said area of District Lot 000. Payments shall be scheduled as follows:

a) within 10 days of receipt of scaling records, an advance of $ _____ (commonly 60%) per tonne.

b) within 30 days of completion of logging, the remainder of $ _____ (commonly 40%) per tonne, less any amounts necessary to repair damages to the access roads, and to leave the area in a workmanlike manner in keeping with good standards of logging practice.

Prior to making any payments to the Contractor, the Chief and Band Council's representative may require the Contractor to furnish receipted payrolls to the Chief and Band Council's representative in compliance with the Woodworker Lien Act.

10. APPLICABLE LAWS

The Contactor shall, while performing the work hereunder, observe and perform (an pay and satisfy all assessments or remittances pursuant to) the provisions of the Worker's Compensation Act, Employment Standards Act, Unemployment Insurance Act (Canada), and the Canadian Pension Plan (Canada), and regulations thereunder, and the hours of work laws and minimum wage laws of Alberta and all other Governmental regulations, statutes and orders (including obtaining all permits or authorizations) pertaining to or having a bearing upon the Contractor's work hereunder, and shall indemnify and save harmless the Chief and Band Council's representative in respect thereof.

11. LIABILITY

The Contractor shall indemnify and hold harmless the Chief and Band Council's representative and/or any third parties from any and all loss, costs, damages, expenses and claims of every nature whatsoever arising from any fire caused by the negligence of the Contractor or any breach of or failure to observe any Provincial, Federal, and Municipal Government laws, regulations or instructions.

12 . ARBITRATION

In the even that any dispute arises between the parties hereto which cannot be reasonably settled, the dispute shall be settled by single arbitrator appointed pursuant to the Commercial Arbitration Act. Both Chief and Band Council's representative and Contractor shall be bound by the arbitrator's ruling, and shall pay equal portions of any expenses incurred.

13. NOTICE

For the purposes of this Agreement, notice shall be deemed to be given to the Chief and Band Council's representative at ____________________ (Band's address), and to the Contractor at __________________________ (Contractor's address), or to such other places as shall be from time to time substituted in writing, and such notice shall be deemed to have been received when delivered by hand or forty-eight hours from posting by double registered mail from any post office within the Province of Alberta.

IN WITNESS THEREOF the parties hereto have executed this Agreement

Date: ______________________________

Chief: ______________________________ Contractor: ______________________________

APPENDIX G

WHITEFISH LAKE BAND COUNCIL - POST HARVEST REPORT

Canada-Alberta Partnership Agreement in Forestry
Forest Management Plan - Whitefish Lake First Nation IR 155, 155A, 155B
- March 16, 1994

Timber Location:

(Quarter Section/Section/Twp/Range/Mer)

Condition of Logging Site:
Was entire area (1/4 section) logged?
If not, which areas were logged and which were not? Provide acreage for each:

Were all mechantable trees harvested?
If not, how much merchantable volume and acreage remains on site?

Was the site properly cleaned up?
If not, what remains to be done before silviculture work can commence?

Fulfilment of Specified Operating Conditions:
Did the Permit Holder(s) observe all operating conditions?
If not, which operating conditions were not followed?

Is remedial action required?
Please specify (e.g., holdback of deposits/performance bonds, require contractor(s) to clean up, etc.)

Comments:
Please provide any other information which can help in determining silviculture prescriptions:

Dates and Signature:
Name (PRINT) ______________________________
Signed: ______________________________
FOR THE WHITEFISH LAKE BAND COUNCIL

Date Signed: ______________________________

APPENDIX H

FISH AND WILDLIFE HABITAT PROTECTION

Canada-Alberta Partnership Agreement in Forestry
Forest Management Plan - Whitefish Lake First Nation

IR 155, 155A, 155B - March 16, 1994

9.5.9 FISH AND WILDLIFE HABITAT PROTECTION

Timber harvesting is recognized to have a significant impact on the management of fish and wildlife and should be conducted in a manner that is compatible with fish and wildlife objectives.

The design of harvest layout, the construction and tenure of access roads and the organization of logging operations should be conducted in a manner that is sensitive to the needs of wildlife species designated as important in the area, for a balance of food, cover and protection to maintain or enhance viable populations.

Block width and line of sight are the most important factors in cutblock design from a wildlife point of view. To that effect, for big game species (moose, deer, elk), clearcuts should be no larger than 16 to 80 hectares and no wider than 200 meters to ensure close proximity to escape cover.

Buffer areas should be established where required and as identified in an earlier stage. Examples of where buffers are required include the retention of riparian vegetation along watercourses and the provision of protective cover along ungulate travel corridors and around natural meadows and mineral licks.

Anyone who may be affected by the proposed timber harvesting should be contacted prior to the commencement of operations. Traditional access trails, line cabins or suitable alternative should be retained.

Anyone who may be affected by the proposed timber harvesting should be contacted prior to the commencement of operations. Traditional access trails, line cabins or suitable alternatives should be retained.

Because many roads must remain open for various forest management reasons (regeneration surveys, planting, tending), minimizing damage to the fishery depends on well-designed alignments combined with high construction standards and regular periodic maintenance. When these conditions are met, multipass logging is a desirable alternative for fisheries management.

APPENDIX I

Society for Applied Anthropology
Guides to Ethical Professional Practice

pp. 51-54 *In* van Willigen, John. 1993. Applied Anthropology (Revised Edition). Bergin & Garvey, Westport, Conn., 276 pp.

For our purposes the most useful statements on ethical practice for application are the statements of the *Society for Applied Anthropology* and the *National Association for the Practice of Anthropology*. These statements were written with reference to the work circumstances of the applied or practicing anthropologist.

The statement of the *Society for Applied Anthropology* is quoted below. This statement is intended as a guide. Approved in 1983, the statement applies to the membership of the society, although it can serve as a guide to others (Committee on Ethics, *Society for Applied Anthropology* 1983).

Statement on Professional and Ethical Responsibilities, Society for Applied Anthropology.
This statement is a guide to professional behavior for the members of the Society for Applied Anthropology. As members or fellows of the Society we shall act in ways that are consistent with the responsibilities stated below irrespective of the specific circumstances of our employment.

This statement is the fourth version of the society's ethics statement. It was modified in response to concern about the increase in the number of anthropologists employed in applied roles outside of universities. This statement is not associated with a system of certification or licensing. Because of this, the society's Ethics Committee is not equipped with sanctions against unethical behaviour.

The first paragraph states the basic components of ethical research practice - voluntary participation, informed consent, and confidentiality. This is supplemented with a reference to risk:

> 1.) To the people we study we owe disclosure of our research goals, methods, and sponsorship. The participation of people in our research activities shall only be on a voluntary and informed basis. We shall provide a means throughout our research activities and in subsequent publications to maintain the confidentiality of those we study. The people we study must be made aware of the likely limits of confidentiality and must not be promised a greater degree of confidentiality than can be realistically expected under current legal circumstances in our respective nations. We shall, within the limits of our knowledge, disclose any significant risk to those we study that may result from our activities.

One point must be emphasized: disclosure of sponsorship is especially important in research that has a practical effect. Individuals who are asked to give consent must be made aware of sponsorship so that they can better calculate their own interest in reference to the goals of the sponsoring organization.

The paragraph contains reference to the fact that in the United States the promise of confidentiality from a researcher will not protect against a legal subpoena. Researchers are not legally protected as are physicians. We are more like journalists in this regard. Risk is primarily viewed in terms of the physical or psychological risk associated with a research procedure as applied on an individual basis. The risks that are generated by social science research tend to be psychological, political, and economic. These risks should be disclosed.

The statement's second paragraph is clearly keyed to social survival:

> 2.) To the communities ultimately affected by our actions we owe respect for their dignity, integrity, and worth. We recognize that human survival is contingent upon the continued existence of a diversity of human communities, and guide our professional activities accordingly. We will avoid taking or recommending action on behalf of a sponsor which is harmful to the interests of a community.

The view taken here is that cultural diversity is adaptive and the destruction of it reduces the species' potential to survive. Thus, the scheme is not based upon a relativistic conception of what is right or fair, but on a fundamental view of what behaviors relate to and support survival of the species. The last reference to community interests is particularly important to the action-taking anthropologist. The statement means that in a basic sense, even though employed by an organization, a basic overriding responsibility toward communities exists.

The third paragraph addressed the area that produces the most difficulty in ethics - relationships with colleagues:

> 3.) To our social science colleagues we have the responsibility to not engage in actions that impede their reasonable professional activities. Among other things this means that, while respecting the needs, responsibilities, and legitimate proprietary interests of our sponsors we should not impede the flow of information about research outcomes and professional practice techniques. We shall accurately report the contributions of colleagues to our work. We shall not condone falsification or distortion by others. We should not prejudice communities or agencies against a colleague for reasons of personal gain.

While the entire research community benefits from the free flow of information, sponsoring organizations may have legitimate needs that may result in restrictions on the flow of information. We should not engage in unfair competition with a colleague.

People who train applied anthropologists have the obligation to remain up-to-date in their skills:

> 4.) To our students, interns, or trainees we owe nondiscriminatory access to our training services. We shall provide training which is informed, accurate, and relevant to the needs of the larger society. We recognize the need for continuing education so as to maintain our skill and knowledge at a high level. Our training should inform students as to their ethical responsibilities. Student contributions to our professional activities, including both research and publication, should be adequately recognized.

Further, persons offering training in applied anthropology need to consider continually the needs of society in terms of the training that they offer.

The fifth paragraph points to one of the important uses of ethics statements, the protection of the employee from requests for unethical practice:

> 5.) To our employers and other sponsors we owe accurate reporting of our qualifications and competent, efficient, and timely performance of the work we undertake for them. We shall establish a clear understanding with each employer or other sponsor as to the nature of our professional responsibilities. We shall report our research and other activities accurately. We have the obligation to attempt to prevent distortion or suppression of research results or policy recommendations by concerned agencies.

The best protection is up-front discussion of the constraints. This may serve as a means for supporting the applied anthropologist in cases where the agency that employs him or her is suppressing or distorting research results.

The ethics statement concludes:

> 6.) To society as a whole we owe the benefit of our special knowledge and skills in interpreting sociocultural systems. We should communicate our understanding of human life to the society at large.

Restated in simple terms, we need to communicate to the public anthropological knowledge that will be useful to them and provide positive influences on their lives.

SUMMARY

The ethical concerns of applied anthropologists are complicated by the fact that their work is intended to have a practical effect. Ethics for action are closely related to ethics for research, because our action and policy products are rooted in research. The foundation of ethical research practice can be conveyed in a few words: confidentiality, voluntary consent, and risk disclosure. Action and policy must, for ethical reasons, be initiated in reference to community interests as well as the interests of sponsoring agencies. At this point applied anthropologists must be self-policing from the standpoint of ethics, because the discipline does not have a mechanism for certification of individuals or accreditation of training programs.

Ethics need not be considered as a constraint, but as a guide to effective practice. That is, through ethical practice more effective action and policies can be developed. Why is this so? The primary reason is that relationships between researchers and those researched are made more regular and predictable. Further, the long-term potential of these relationships is enhanced. Thus, we all have a stake in ethical practice. It is important that each applied anthropologist share in the responsibility.

APPENDIX J

INFORMED CONSENT LETTERS

University of Alberta
Edmonton
Canada T6G 2H4

Department of Anthropology
13-15 HM Tory Building, Telephone (403) 492-3879
Fax (403) 492-5273

October 02, 1995

Chief Eddie Tallman
Whitefish Lake First Nation
Atigameg, Alberta T0G 0C0

Dear Chief Tallman:

I am writing to you, as Chief of the Whitefish Lake First Nation and as a member of the Whitefish Lake/Government of Alberta Steering Committee re: the implementation of the cooperative management Memorandum of Understanding. I am requesting your consent to work with you, Whitefish Lake First Nation councillors, and other members of the Whitefish Lake First Nation who you feel are appropriate, on the determination of cooperative management model development.

There has been minimal research done in Canada regarding the implications of traditional land use, industrial activity, government policy, and statutory requirements on First Nation resource management and partnership agreements. There has been even less work done pertaining to the impact of these factors - including the concept of "cooperative management" - of First Nation economic development.

The term "cooperative management" has assumed a life of its own in its application to management and use of natural resources. Cooperative management itself remains ambiguous in definition. Further, the use of the term in the absence of clear definition has provided little of practical relevance to policy and program development and implementation - at both provincial and local levels.

First Nations, government, and industry all have a stake in the effective management of natural resources, including the management of forests. For all parties, unless "cooperative management" is understood in a meaningful way and implemented effectively, it will become yet another concept in a long history whereby little is accomplished at the local level. For First Nations, this means a continuing lack of viable opportunities for economic development: few jobs, little business development, and a limited role in decision-making.

It is my intention to contribute to the further development of relevant "cooperative management" through the undertaking of dissertation research that is of relevance to all parties concerned. To accomplish this goal, I propose to play a role in the development of the following:

1. determine clearly the cultural basis for an effective cooperative management regime based on work with Whitefish Lake First Nation in the areas of traditional land use, values, history and community reality and work with government officials in the areas of regulation, law, and implementation; and

2. develop relevant and well-defined cooperative management models to aid in policy development and practical implementation. The community itself and potential partners in government and industry need to be aware of workable cooperative management models. As we currently have very few working models that are based in Canada, it is necessary to review material from other areas of the world that are experiencing similar situations.

For purposes of completing my research, five steps are required:

1. research in the community of Whitefish Lake to acquire the information necessary in understanding the First Nation view of cooperative management;

2. research with Steering Committee members and other government officials who are working directly in this area;

3. liaison with relevant private sector resource companies;

4. bibliographic research to arrive at possible cooperative management models that actually work; and

5. the proposal of recommendations to the partners, based on these avenues of approach.

The work generated through the above process must be public in nature as I am proposing to research this problem, and arrive at possible solutions, as an academic rather than as a consultant. As such, the nature of the research process is bound clearly by tight ethical parameters. While the final document must be public in nature I am, however, bound by the ethics of anthropological research in such a manner that those participating are protected and informed consent obtained.

All information provided will be made available to all the partners in the cooperative management process unless otherwise stated. Should confidentiality be required regarding an issue, all verbal and documentary material provided will be kept in confidence. It must be remembered, however, that a workable model is possible only if individuals are willing to contribute to the process in a reasonably open manner.

Two end products are planned: 1. the provision of various possible models of cooperative management to the Steering Committee for consideration, including (a) definition(s) of the term itself, as applied to resource management in Alberta; and 2. the completion of my dissertation and publication of same.

As you are aware, I require a written confirmation of approval from the First Nation in order to meet the requirements of the Department of Anthropology ethics committee before continuing with this research. Therefore, further to the verbal confirmation from yourself and councillors provided in late-September, I am requesting your written approval on the signature line noted below.

Sincerely yours,

Michele J. Ivanitz
Department of Anthropology

c.c.: Dr. Clifford Hickey, supervisor

Eddie Tallman
Chief
Whitefish Lake First Nation

October 03/95
Date

University of Alberta
Edmonton

Department of Anthropology

Canada T6G 2H4

13-15 HM Tory Building, Telephone (403) 492-3879
Fax (403) 492-5273

October 02, 1995

Mr. Cliff Supernault
Chief Executive Officer
Aboriginal Affairs
Government of Alberta
13th Floor, Commerce Place
Edmonton, Alberta T5J 4L4

Dear Mr. Supernault:

I am writing to you, as the Chief Executive Officer of a member Alberta Government Department of the Whitefish Lake/Government of Alberta Steering Committee re: the implementation of the cooperative management Memorandum of Understanding. I am requesting your consent to work with you, and with other officials of your department who you feel are appropriate, on the determination of cooperative management model development.

There has been minimal research done in Canada regarding the implications of traditional land use, industrial activity, government policy, and statutory requirements on First Nation resource management and partnership agreements. There has been even less work done pertaining to the impact of these factors - including the concept of "cooperative management" - of First Nation economic development.

The term "cooperative management" has assumed a life of its own in its application to management and use of natural resources. Cooperative management itself remains ambiguous in definition. Further, the use of the term in the absence of clear definition has provided little of practical relevance to policy and program development and implementation - at both provincial and local levels.

First Nations, government, and industry all have a stake in the effective management of natural resources, including the management of forests. For all parties, unless "cooperative management" is understood in a meaningful way and implemented effectively, it will become yet another concept in a long history whereby little is accomplished at the local level. For First Nations, this means a continuing lack of viable opportunities for economic development: few jobs, little business development, and a limited role in decision-making.

It is my intention to contribute to the further development of relevant "cooperative management" through the undertaking of dissertation research that is of relevance to all parties concerned. To accomplish this goal, I propose to play a role in the development of the following:

1. determine clearly the cultural basis for an effective cooperative management regime based on work with Whitefish Lake First Nation in the areas of traditional land use, values, history and community reality and work with government officials in the areas of regulation, law, and implementation; and

2. develop relevant and well-defined cooperative management models to aid in policy development and practical implementation. The community itself and potential partners in government and industry need to be aware of workable cooperative management models. As we currently have very few working models that are based in Canada, it is necessary to review material from other areas of the world that are experiencing similar situations.

For purposes of completing my research, five steps are required:

1. research in the community of Whitefish Lake to acquire the information necessary in understanding the First Nation view of cooperative management;
2. research with Steering Committee members and other government officials who are working directly in this area;
3. liaison with relevant private sector resource companies;
4. bibliographic research to arrive at possible cooperative management models that actually work; and
5. the proposal of recommendations to the partners, based on these avenues of approach.

The work generated through the above process must be public in nature as I am proposing to research this problem, and arrive at possible solutions, as an academic rather than as a consultant. As such, the nature of the research process is bound clearly by tight ethical parameters. While the final document must be public in nature I am, however, bound by the ethics of anthropological research in such a manner that those participating are protected and informed consent obtained.

All information provided will be made available to all the partners in the cooperative management process unless otherwise stated. Should confidentiality be required regarding an issue, all verbal and documentary material provided will be kept in confidence. It must be remembered, however, that a workable model is possible only if individuals are willing to contribute to the process in a reasonably open manner.

Two end products are planned: 1. The provision of various possible models of cooperative management to the Steering Committee for consideration, including (a) definition(s) of the term itself, as applied to resource management in Alberta; and 2. the completion of my dissertation and publication of same.

Should you agree to participate in my research as a member of the MOU Steering Committee, please indicate your approval on the signature line noted below.

Sincerely yours,

Michele J. Ivanitz
Department of Anthropology

c.c.: Dr. Clifford Hickey, supervisor
Chief Eddie Tallman, Whitefish Lake First Nation

Mr. Cliff Supernault
Chief Executive Officer
Aboriginal Affairs
Government of Alberta

Oct 3/95
Date

University of Alberta
Edmonton

Department of Anthropology

Canada T6G 2H4

13-15 HM Tory Building, Telephone (403) 492-3879
Fax (403) 492-5273

October 02, 1995

Mr. Cliff Henderson
Assistant Deputy Minister, Land and Forest Services
Department of Environmental Protection
Government of Alberta
10155-102 Street
Edmonton, Alberta T5K 2G8

Dear Mr. Henderson:

I am writing to you, as a member of the Whitefish Lake/Government of Alberta Steering Committee re: the implementation of the cooperative management Memorandum of Understanding. I am requesting your consent to work with you, and with other officials of your department who you feel are appropriate, on the determination of cooperative management model development. Attached please find a letter from Chief Eddie Tallman and Cliff Supernault, Chief Executive Officer of Aboriginal Affairs, supporting my request.

There has been minimal research done in Canada regarding the implications of traditional land use, industrial activity, government policy, and statutory requirements on First Nation resource management and partnership agreements. There has been even less work done pertaining to the impact of these factors - including the concept of "cooperative management" - of First Nation economic development.

The term "cooperative management" has assumed a life of its own in its application to management and use of natural resources. Cooperative management itself remains ambiguous in definition. Further, the use of the term in the absence of clear definition has provided little of practical relevance to policy and program development and implementation - at both provincial and local levels.

First Nations, government, and industry all have a stake in the effective management of natural resources, including the management of forests. For all parties, unless "cooperative management" is understood in a meaningful way and implemented effectively, it will become yet another concept in a long history whereby little is accomplished at the local level. For First Nations, this means a continuing lack of viable opportunities for economic development: few jobs, little business development, and a limited role in decision-making.

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3. liaison with relevant private sector resource companies;

4. bibliographic research to arrive at possible cooperative management models that actually work; and

5. the proposal of recommendations to the partners, based on these avenues of approach.

The work generated through the above process must be public in nature as I am proposing to research this problem, and arrive at possible solutions, as an academic rather than as a consultant. As such, the nature of the research process is bound clearly by tight ethical parameters. While the final document must be public in nature I am, however, bound by the ethics of anthropological research in such a manner that those participating are protected and informed consent obtained.

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Should you agree to participate in my research as a member of the MOU Steering Committee, please indicate your approval on the signature line noted below.

Sincerely yours,

Michele J. Ivanitz
Department of Anthropology

c.c.: Dr. Clifford Hickey, supervisor
Chief Eddie Tallman, Whitefish Lake First Nation
Mr. Cliff Supernault,Chief Executive Officer, Aboriginal Affairs

CHenderson
Mr. Cliff Henderson
Assistant Deputy Minister
Land and Forest Services
Environmental Protection

Nov 1/95
Date

University of Alberta
Edmonton

Department of Anthropology

Canada T6G 2H4

13-15 HM Tory Building, Telephone (403) 492-3879
Fax (403) 492-5273

October 03, 1995

Mr. Jim Nichols
Assistant Deputy Minister, Natural Resource Services
Department of Environmental Protection
Government of Alberta
10155-102 Street
Edmonton, Alberta T5K 2G8

Dear Mr. Nichols:

I am writing to you, as a member of the Whitefish Lake/Government of Alberta Steering Committee re: the implementation of the cooperative management Memorandum of Understanding. I am requesting your consent to work with you, and with other officials of your department who you feel are appropriate, on the determination of cooperative management model development. Attached please find a letter from Chief Eddie Tallman and Cliff Supernault, Chief Executive Officer of Aboriginal Affairs, supporting my request.

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First Nations, government, and industry all have a stake in the effective management of natural resources, including the management of forests. For all parties, unless "cooperative management" is understood in a meaningful way and implemented effectively, it will become yet another concept in a long history whereby little is accomplished at the local level. For First Nations, this means a continuing lack of viable opportunities for economic development: few jobs, little business development, and a limited role in decision-making.

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Should you agree to participate in my research as a member of the MOU Steering Committee, please indicate your approval on the signature line noted below.

Sincerely yours,

Michele J. Ivanitz
Department of Anthropology

c.c.: Dr. Clifford Hickey, supervisor
Chief Eddie Tallman, Whitefish Lake First Nation
Mr. Cliff Supernault, Chief Executive Officer, Aboriginal Affairs

Mr. Jim Nichols
Assistant Deputy Minister
Natural Resource Services
Environmental Protection

Nov 1/95
Date

University of Alberta
Edmonton
Department of Anthropology
Canada T6G 2H4
13-15 HM Tory Building, Telephone (403) 492-3879
Fax (403) 492-5273

December 04, 1995

Mr. Dave Knight
Woodlands Manager
Tolko Industries Ltd.
Bag 3000
High Prairie, Alberta
T0G 1E0

Dear Mr. Knight:

I am writing to you as the woodlands manager responsible for Tolko forest management participation re: the Whitefish Lake First Nation/Government of Alberta Cooperative Management Memorandum of Understanding. I am requesting your consent to work with you, and with other officials of Tolko Industries Ltd. on the determination of cooperative management model development. Attached please find letters from Chief Eddie Tallman and Cliff Supernault, Chief Executive Officer of Aboriginal Affairs, supporting my request.

There has been minimal research done in Canada regarding the implications of traditional land use, industrial activity, government policy, and statutory requirements on First Nation resource management and partnership agreements. There has been even less work done pertaining to the impact of these factors - including the concept of "cooperative management" - of First Nation economic development.

The term "cooperative management" has assumed a life of its own in its application to management and use of natural resources. Cooperative management itself remains ambiguous in definition. Further, the use of the term in the absence of clear definition has provided little of practical relevance to policy and program development and implementation - at both provincial and local levels.

First Nations, government, and industry all have a stake in the effective management of natural resources, including the management of forests. For all parties, unless "cooperative management" is understood in a meaningful way and implemented effectively, it will become yet another concept in a long history whereby little is accomplished at the local level. For First Nations, this means a continuing lack of viable opportunities for economic development: few jobs, little business development, and a limited role in decision-making.

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4. bibliographic research to arrive at possible cooperative management models that actually work; and

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All information provided will be made available to all the partners in the cooperative management process unless otherwise stated. Should confidentiality be required regarding an issue, all verbal and documentary material provided will be kept in confidence. It must be remembered, however, that a workable model is possible only if individuals are willing to contribute to the process in a reasonably open manner.

Two end products are planned: 1. the provision of various possible models of cooperative management to the Steering Committee for consideration, including (a) definition(s) of the term itself, as applied to resource management in Alberta; and 2. the completion of my dissertation and publication of same.

Should you agree to participate in my research, please indicate your approval on the signature line noted below.

Sincerely yours,

Michele J. Ivanitz
Department of Anthropology

c.c.: Dr. Clifford Hickey, supervisor
Chief Eddie Tallman, Whitefish Lake First Nation
Mr. Cliff Supernault, Chief Executive Officer, Aboriginal Affairs

Dec 6/95
Date

Mr. Dave Knight
Woodlands Manager
Tolko Industries Ltd.

Appendix K
Local-Global Articulations
(Chapter 6 - Expanded Discussion)

I. Introduction

This Appendix provides a full discussion of the models noted in Chapter 6: Local - Global Articulations. It also provides summaries of guiding principles outlined in three additional sectors: marine mammals; fisheries and watersheds; and wildlife.

II. Model Forest Program

In December of 1990 the federal "Canada's Green Plan For a Healthy Environment" action plan was released. The importance of Canada's forests and a concern for forest management was addressed in the plan, emphasizing the need for integrated management and recognizing both timber and non-timber forest values. Public concerns regarding biodiversity were addressed, and it was noted that environmental issues were becoming global in scope. Effective strategies would, therefore, be required to achieve sustainable management of forest resources, conserve natural systems, and minimize environmental degradation. These strategies would, by necessity, be global in scope and would foster cooperation in international partnerships between Canada and other countries in resolving environmental issues. One aspect of this cooperation was the creation of the Model Forest Program in June 1992. There are two components to the program: 1) the Canadian Model Forest Sites, and 2) a network of international model forest sites in Russia, Malaysia, Mexico, and the United States.

The model forest network[183] is based on principles of sustainability and networking, and sites were chosen in accordance with national criteria. Each model commits itself to a set of objectives that reflect the environmental, socio-economic, cultural, and political contexts of its area. The Department of Natural Resources Canada, Canadian Forest Service, and the International Development Research Centre are involved in the coordination of the national and international components of the Model Forest Network. There are currently 18 model forest sites in the network. Each is following different paths in decision-making structures that will lead to sustainable forest management, based on a variety of indicators. A common feature of each site is the building of working partnerships among individuals and organizations who have an interest in sustainable forest management. This network may include: industry, government, First Nations, municipalities, environmentalists, agriculturalists, and other third party interests. The point is to make the process of integrated forest management as inclusive as possible, which means setting objectives that reflect the environmental, socio-economic, cultural and political context of its area. Solutions to local forest management issues in the short term, and strategic forest management plans for the long term, are to be developed. Some of these, as well as the partnerships involved in management, are discussed as follows.

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[183] See: Department of the Environment *Canada's Green Plan for a Healthy Environment*(1990); Beckley (1994); Booth (1994); Brand et al (1993, 1994); Bunnell (1994); Duinker (1994); Kessler (1994); Kill and Newstead (1994); Kulshrestha (1994); Natural Resources Canada et al (1991, 1992, 1994a, 1994b, 1994c, 1995, 1996); Runyon (1994); Titus (1994); van Kooten (1994); and Walker (1994).

A. Canadian Participants

The Canadian Model Forest sites include: Western Newfoundland (Newfoundland); Fundy (New Brunswick); Lower St. Lawrence (Quebec); Eastern Ontario; Lake Abitibi (Ontario); Manitoba; Prince Albert (Saskatchewan); Foothills (Alberta); McGregor (British Columbia); and Long Beach (British Columbia). The types of forests represented in the model Forest program range from different types of boreal forest to the old growth stands of Clayoquot Sound. Noted by Beckley (1994); Booth (1994); Bunnell (1994); Duinker (1994); Kessler (1994); Kulshreshtha (1994); Moore (1994); National Aboriginal Forestry Association (1993, 1996); Natural Resources Canada et al (1991, 1992, 1994c, 1996); Runyon (1994); Titus (1994); van Kooten (1994); and Walker (1994), management issues focussing on social, ecological, and economic impacts on sustainable development include: decision-making structures; development of working objectives; the linking of social and economic well-being; economic and non-economic values of trees; adequate base-line data; potential economic and non-economic indicators; indicators and goals for biodiversity; wood supply for timber companies and domestic use; integrated management of forest, moose, caribou and a variety of small furbearers; riparian buffer zones; migratory birds; tenured management; public education; recreation and wilderness parks; First Nations reserves; socio-cultural diversity; hydro interests; harvesting plans (both trees and wildlife); forecasting tools; wildlife habitat; disturbance modeling; the development of resource data bases; and participatory organizational structures.

Each model forest approaches these issues in a different manner, based upon individual management goals. Two of the most comprehensive approaches taken regarding the meaningful involvement of First Nations in model forest activities are the Prince Albert Model Forest and the Long Beach Model Forest. In both cases, extensive socio-economic and biological research is being undertaken that directly involves Aboriginal stakeholders in the management process. In both cases, Aboriginal representation[184] on the management boards is extensive.

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[184] In the case of the Long Beach Model Forest, eleven Aboriginal communities are represented on the Board of Directors through the Nuu-Chah-Nulth Tribal Council. This Model Forest did not become operational until two years after the commencement of the project owing to public controversy surrounding forest practices in Clayoquot Sound. It currently is described as

Partners in the Prince Albert Model Forest include: Weyerhauser Canada, Government of Saskatchewan, local trappers, Prince Albert National Park, the local community, Montreal lake First Nation, and the First Nations represented through the Prince Albert Grand Council. The Prince Albert Model Forest is working intensively toward completing three types of research: inventory; ecosystem; and socio-economic studies. The inventory studies are designed to provide the partners with reliable baseline data on the forest ecosystem. Experimental studies include the impacts of fire, and various forest harvesting and silvicultural practices on wildlife, watersheds, and the diversity of tree and bird species. The socio-economic studies include the cultural history of the local Cree nations and the socio-economic impact of forest resource management decisions within the Model Forest. This research also has spin-off effects for the First Nations: data will be available which will allow them to participate more effectively in future discussions surrounding forest resource use - including non-market valuations.

The Long Beach Model Forest, given the overwhelming controversy and the adversarial roles that have been traditionally played between the participating groups, is concentrating on building mutual understanding among the partners of each other's interests. Through this process, they hope to develop integrative solutions that will accommodate all forest values. They have invested a significant amount of time in establishing a representative and "participatory" (Natural Resources Canada et al 1996) organizational structure that accommodates diverse interests. The structure provides for sectoral divisions based on interests, common concerns, and common values. Each sector is responsible for its internal organization; however, the overall Model Forest society must concur with the results of deliberations. The partners/sectors include: the First Nations noted previously; conservationists; educators; major manufacturers; local government; labour; and youth[185].

On paper the Model Forest programs are working well (Natural Resources Canada et al 1996); however, Aboriginal participants of the Workshop on Aboriginal Participation in Canada's Model Forest Program had other comments to make (National Aboriginal Forestry Association 1996). As noted previously, only five out of the ten Canadian Model Forests had any form of aboriginal participation. It was further noted during the conference that: the Model Forest does not

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community-based and two-culture. In the case of the Prince Albert Model Forest, three of the seven seats on the Board are held by Aboriginal people. Aboriginal representation includes: the Federation of Saskatchewan Indian Nations; the Prince Albert Grand Council; and the Montreal Lake Indian Band.

[185] Extensive involvement of the youth is one of the distinguishing characteristics of the Long Beach Model Forest. Youth are considered to be a major element of the Model Forest, focussing on: education; involvement in project; research; and sponsored programs. Youth must be involved as the Model Forest process will "reach into our future lives, and the future lives of our children and our grandchildren" (Natural Resources Canada et al 1996:35).

address the question of sustainable development from the perspective of First Nations; the perception exists that the program has been "commandeered" by special interest groups; First Nations participation in some Model Forest projects is token only; an adversarial approach to First Nations is taken by some Model Forests; First Nations play a marginal role only; the short-term (5 year) duration of the Model Forest program has negative future implications; First Nations aboriginal and treaty rights are being compromised; companies are using the Model Forest program as a strategy to obtain additional cutting areas; and there is a perception that the Model Forest program is more about the process of forming partnerships that changing things on the ground, thereby creating false expectations in communities (National Aboriginal Forestry Association, 1996). Many of these comments were based on years of sour history between First Nations, both federal and provincial orders of government, and industry. Aboriginal people were excluded from playing a meaningful role in forest management; as a result, many do not trust the process underway through the Model Forests. Further, Aboriginal people do not view themselves as "just another stakeholder". As a result, any initiative that places them in that category is unlikely to be supported strongly or consistently[186]. The National Aboriginal Forestry Association (1996) summarizes this perception very well:

> Model forests espouse a multi-stakeholder approach which levels the playing field and gives equal voice to the participants. In multi-stakeholder processes, Aboriginal people are seen as one interest group, and consequently, are accorded one vote or voice in the process. On the other hand, non-Aboriginal people are seen to have almost limitless interests including wildlife, recreation, labour, fish and game, business, to name a few. As a result, Aboriginal people are inevitably the minority.

In Model Forest structures (where First Nations) are not an insignificant minority, or where First Nations interests are elevated to the philosophical level and embodied in the objectives of the organization, there has been a greater willingness to participate (Ibid:6).

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[186] This is evidenced through the variations in comments from participants in the Model Forest program. For the most part, those representing the Long Beach and Prince Albert Model Forests, where the Aboriginal representation is strong, did not speak negatively about the process but viewed it as a chance for meaningful involvement and change.

B. International Participants

There are four international participants in the Model Forest Program: Gassinski (Russia); Calakmul, Mariposa Monarca and Chihuahua (Mexico); Bentong (Malaysia); and Applegate, Cispus, and Hayfork (United States).

The Gassinski Model Forest is most closely related to Aboriginal participation in Canadian model forests. Forests in the boreal forest of Russia's far east are managed primarily for timber production. The Model Forest includes indigenous representation by the Nanai, a people whose economic base is closely linked to their traditional way of life.It is critical in planning for the Gassinski forest, therefore, that the natural resources of the area are conserved. This conservation process, in turn, will ensure the protection of the traditional indigenous economy (Federal Forestry Service of Russia 1996). The primary activity currently underway is to complete an ambitious inventory, which is difficult given a scarcity of tools[187] and technology[188]. Research initiatives undertaken through the Model Forest program areas are unprecedented for this area of Russia and include: the development of a Geographic Information System (GIS) for production of the first set of thematic maps on ecological risk assessment, soils, rare and endangered plants and animals, and forest inventories; an extensive historical review of the Nanaiskii District, including archaeological data; the employment structure of indigenous people; socio-economic problems faced by indigenous people, such as poor infrastructural development, chronic unemployment, and the over-utilization of resources using traditional approaches[189]; protection of riparian zones with buffers; non-wood forest products; agriculture; game and sport hunting; fishing; social infrastructure such as schools and hospitals; and the preservation of the Gassinski Model Forest as a healthy ecosystem. This includes the preservation of two extensive pine nut-producing zones.

One of the primary concerns facing the Gassinski Model Forest is the harmonization of community and environment. This can only be done through: ensuring that the community is included in the development of land use plans that are "economically profitable, socially-acceptable, and environmentally-sound" (Federal Forestry Service of Russia:4); involving the Nanai in the implementation of projects and in the administration of the Model Forest; keeping all residents of the forest area informed on all aspects of the Model Forest project; reaching agreement among the partners regarding the potential productivity of the resources and their use; and the transformation of the Gassinski Model Forest into an example of integrated resource utilization.

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[187] Other factors having a negative impact on not only sustainable logging activities but on logging activities generally, include: the deterioration of equipment and transportation systems; antiquated logging technology; the imbalance in the production plan regarding raw forest materials and natural resources; and the difficult financial situation faced by many logging companies (Federal Forestry Service of Russia 1996).

[188] The Gassinski Model Forest has been twinned with the McGregor Model Forest in British Columbia to provide technical and administrative support to the Russian Model Forest Program.

[189] This "over-utilization" refers to practices related to over-fishing through traditional means such as the use of nets and sweep nets, complete partitioning of rivers and setting of traps, harpoons, landing nets, and various hooks, in addition to the 22 organizations now undertaking large scale salmon fishing.

The partnerships formed in the Gassinski process include: representatives from all levels of government; Nanai; industry; research organizations; and international organizations. It is hoped by the Federal Forestry Service of Russia that this collaboration will result in a balanced program of conservation and development that benefits all the communities in the model forest area. It is further hoped that the link with the McGregor Model Forest in Canada will foster a sharing of knowledge, skills and techniques among interested groups which can be used throughout the world[190].

III. Other Selected Canadian Initiatives

There are a variety of resource management agreements and processes in various stages of implementation throughout Canada[191] and it is not possible to review them all to any depth in this dissertation. There are, however, two forest management agreements implemented in Saskatchewan and Quebec that are noteworthy.

A. Sipanok Area Management and Development Agreement

This agreement has built a cooperative atmosphere between provincial resource management officials, First Nations of Shoal Lake and Red Earth, and other resource management users. The agreement was signed in 1992 and stands as a first in the Province of Saskatchewan. It establishes principles and an administrative system for the cooperative management of forests, fish, furbearers, and other wildlife resources. It further ensures the development of methods for First Nations participation in resource inventories and the allocation of harvests. The Sipanok Agreement, covering 3250 sq.km. is implemented through a Co-management Council. The chairmanship alternates between the Province of Saskatchewan and a representative of either the Red Earth or Shoal Lake First Nations. Membership includes representation from each First Nation, the Province of

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[190] For further discussion on the expanded application of models developed through this program in other areas of the world, see the *Chihuahua Model Forest Proposal* (1994) and the *Calakmul Productive Ecology Proposal* (1994).

[191] For further references, see: Binder and Hanbidge (1993); Feit (1993); Freeman (1993); McDonald (1993); McDonald and Fleming (1993); Olsen and O'Donnell (1994); Osharenko (1993).

Saskatchewan, the Federation of Saskatchewan Indian Nations, two rural municipalities, the general public and the Government of Canada. The Sipanok Area Management and Development Agreement Economic Development Board was established through the Agreement and has members from each First Nation and the province; it recommends and carries out the programs approved under the sub-agreements.

This Agreement is unique in that it recognizes that the two First Nations involved have a unique role in the sustainable management and use of renewable resources on Crown lands in the area. The Agreement emphasizes also that employment of First Nations people in resource management and economic development opportunities should be enhanced. Renewable resource use by the general public should be maintained, and a consultation process with all interest groups set up to facilitate this process. The agreement recognizes the legislative and regulatory jurisdiction of the Province of Saskatchewan over renewable resource matters; however, the agreement does provide for the delegation of some responsibilities through sub-agreements. The Province of Saskatchewan retains final authority for management decisions, but there are opportunities to delegate responsibilities for some programs. The First Nations of Red Earth and Shoal Lake are now in the process of playing meaningful roles in renewable resource management.

B. The Algonquins of Barriere Lake - Quebec Partnership

This Trilateral Agreement[192] between the Algonquins of Barriere Lake, the Government of Quebec, and the Government of Canada is based on the accommodation of commercial forest management with the protection of wildlife habitat and the minor timber needs of the Algonquin people. Signed in 1991, the Agreement[193] covers an area of 10,000 sq. km. and includes the preparation of a draft integrated renewable resources management plan and implementation measures, based on the integration of traditional environmental knowledge with scientific technical skills. It also provides for the identification and protection of sensitive zones in order to minimize the impact of forestry activities on the traditional pursuits of Barriere Lake people. Each of the parties to the Agreement appointed a Special Representative mandated to represent them within the framework of the trilateral process and supervise all work undertaken as a result of the Agreement process. This included the supervision of the task force struck to "identify measures to harmonize the conduct of forestry activities with the traditional activities of the Algonquins of Barriere Lake, as well as the sensitive zones which should be protected more especially in a provisional manner" (*Trilateral Agreement* 1991).

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[192] This Agreement was the culmination of many years of acrimony and debate with governments, with hydroelectric developers, and with loggers. Over time, these industrial developments had impacted severely on wildlife habitat and the pursuit of subsistence livelihoods. Today, the capacity of the environment to produce the wildlife and fish that the First Nation depends on is seriously threatened, and recreational hunting pressures continue to grow.

[193] For a copy of the Trilateral Agreement see Appendix L.

As noted by the National Aboriginal Forestry Association (1993), two major areas of disagreement arose between the First Nation and the Government of Quebec when it came time to implement the agreement. This involved, first, the establishment of buffer zones along watercourses: Quebec legislation and regulation did not provide for the degree of environmental protection that the interim measures of the Algonquin - Quebec management plan would provide. The First Nation took the position that the buffer zone width needed to be increased, while the Quebec government took the position that existing legislation, regulations, and policies should prevail until the end of the planning process. The matter was submitted to a judge of the Quebec Superior Court for mediation, who granted the request for the identification and protection of the sensitive areas. He also put forward a recommendation that a conflict resolution mechanism be put in place. The second issue, of paramountcy, was handled through giving the Quebec Special Representative the authority to report to the Quebec Executive Council rather than to individual ministers, and for the Special Representative to work directly with the logging companies operating in the management area in changing their operations to meet interim requirements.

C. Xax'lip First Nation Joint Stewardship Agreement

In the case of British Columbia, the management term "joint stewardship" is used to describe resource management cooperation and encompasses other terms like co-management and cooperative management. Interim principles to guide this joint stewardship include: the unique legal interest First Nations have in the land; the essential and integral role to be played by First Nations in developing and implementing policy on joint stewardship of land and resources; the recognition of traditional and scientific aspects of resource management; respect for third party interests; the right of the government to exercise its powers under statute; and the provision for First Nations participation in resource management. The Xax'lip First Nation entered a joint stewardship with the Province of British Columbia in 1992 which applies to any disposition and use of land, water and resources within the Xax'lip's traditional territory.[194]

The Agreement is particularly noteworthy as it applies to any license, permit, or other disposition and the use of land, water and resources in the traditional territory, including: road construction and maintenance; mining exploration and development; resource harvesting (including fish, wildlife, and forests); uses of water (including hydro electric projects); dispositions of land; telecommunications; research projects; public utilities; and other matters as they arise. Provisions are also made for recognition of decision-making processes of the First Nation in "structuring the participatory processes for resource decision-making" (*Joint Stewardship Agreement* 1992:3), including time lines on reaching consensus with government. A Joint Management Advisory Committee was established to make recommendations to the First Nation and the Province of British Columbia on the details for joint stewardship implementation. Appointments are split equally between the First nation and Province, and meetings would take place in First Nation traditional territory.[195] Also noted is the attempt to operate on principles of consensus. Education initiatives were also to be developed to increase the stakeholders mutual understanding of their respective resource decision-making processes. The Government of Canada was not a signatory to the Agreement, and clauses were included to encourage federal participation.

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[194] See Appendix M for a copy of the *Joint Stewardship Agreement between The Xax'lip First Nation and Her Majesty the Queen in Right of the Province of British Columbia.*

This Agreement also includes an attached Memorandum of Understanding to foster employment and training opportunities for First Nations people associated with the management of natural resources (including forestry initiatives, fish and wildlife initiatives, and economic opportunities), as well as the development of cooperative resource management initiatives such as a Resource Management Plan designed to: collate existing inventories and resource plans for all the provincial ministries; review resource management and use of the traditional territory by the First Nation; and integrate traditional First Nation resource data.

The agreements between the Xax'lip First Nation and the Province of British Columbia assisted in dealing with resource management issues within a context of land claims. The preparation of the resource management plan also facilitated Xax'lip cultural and traditional uses of their territory, and contained the provisions for assistance in securing and operating timber sale licences help them to get on an even footing with non-aboriginal timber operators.

A great deal of effort had gone into planning some of these areas using established procedures of inventory and zoning.

IV. Forest Resource Management Perspectives: Nepal and Zimbabwe

a. Nepal

The Food and Agriculture Organization (1993) points out that prior to the enactment of the

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[195] On the surface, this does not seem important; however, for many years First Nations representatives to meetings held with government were required to travel extensively to provincial capitals or to Ottawa. With the extensive negotiations processes taking place throughout the country on land claims, this requirement gradually shifted. Government representatives now frequently travel to the location of the relevant First Nation.

Forest Nationalization Act in 1957, Nepal's forests had been subjected to uncontrolled destruction and degradation. It is noted by the FAO (1993), Gilmour (1992), Gilmour and Fisher (1991), Gilmour et al (1992) and Messerschmidt (1994) that the 1957 Act could not be implemented, however, owing to: a shortage of trained personnel; a lack of finance and infrastructure; and its overly-ambitious and restrictive policies leading to alienation of many mountain communities who resented the impact of the policies on forests they used. Gilmour et al (1992) point out that this also was the period where many modernization and dependency theorists assumed that developing countries, such as Nepal, required a "push to get them started on the road to development" (Ibid:28). Dependence on weak agricultural economies would lessen as industrial development trickled down to the rural poor. This did not occur as Nepal did not have the infrastructure, resources and social structure[196] to support this form of growth, and the gap between the poor and rich widened. In 1960 the Forest Act was proclaimed, followed by the Forest Protection (Special Arrangement) Act in 1967 - the latter altering the role of professionally trained forest officers from managers to "policemen and judges" (Ibid:79) in an attempt to improve forest management[197] - which appeared to be defined as curbing the perceived deforestation activities of local forest users.

It was not until 1976 that the National Forestry Policy, as part of the Nepal National Forestry Plan, came into effect. This marked the shift to more community-based forest management, with the transfer of authority and responsibility for managing forests from the government to community users. This was accompanied by relevant policy measures such as the Seventh Five-Year Plan[198], the Forest Sector Policy of 1989, the Eighth Five Year Plan (1992-1997), and other sectoral policies in agriculture, settlement, tourism, industrial uses of fuelwood, national security, hydro-electric projects, national parks and wildlife conservation, and water supply. Gilmour (1992) notes that implicit in this policy was the misguided view that since villagers previously did not have the authority to carry out their own forest management, villagers had not managed the forests. In reality villagers had been carrying out local management programs on much of the land that is legally under the control of the government - regardless of legal land tenure.

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[196] For an extensive discussion on the role played and impact of values and institutions on development in Nepal see Bista (1991).

[197] During this period, Messerschmidt (1992) notes that local rural infrastructure was being ignored by developers in the attempt to implement rural agricultural cooperatives. Modern cooperative development was viewed in 1956 as a means of increasing local self-reliance, organizational capacities, and increasing standard of living among rural poor. By 1970, nearly three quarters of the co-operatives were multipurpose. None dealt with production and none had been developed out of indigenous co-operation systems. As a result, 85% of Nepal's existing agricultural co-operatives were reported to be in the process of liquidation as a result of insufficient funding, weakening membership, and a lack of management skills. This was owing to the effect of top-down imposition of development plans, as well as not taking into account the perspective of the rural villagers. Local ideas and practices were not being incorporated in the "planning and implementation of change" (ibid:93).

[198] For further discussion of the relevant measures, see: Food and Agriculture Organization(1993); Gilmour and Fisher (1991) and Messerschmidt (1985, 1994).

Noted by the Food and Agriculture Organization (1993), Fisher (1990a, 1990b), Gilmour and Fisher (1991), Gilmour (1992), Gilmour et al (1992) and Messerschmidt (1985, 1994) the major issues currently faced by Nepal pertain to the meeting of basic needs with respect to timber, fuelwood, fodder, and other minor forest products, taking into account socio-economic, and environmental contributions from the forestry sector to peoples lives. They also note, however, that while this sounds good on paper, in practice solving the problem of meeting basic needs while ensuring sustainability is not clear cut. Gilmour et al (1992) note that past and recent efforts at forest management have been largely technical in nature and have not addressed socio-economic objectives as expressed by communities themselves. In addition to the problems faced at the community level owing to poverty, lack of infrastructure and the caste system, the problem has been further complicated by competing foreign aid projects that set project goals and pace. Gilmour and Fisher (1991) point out that aid activity has placed the central government of Nepal in a position whereby it cannot control its own policy development, thereby further ensuring the maintenance of the *status quo* rather than the implementation of meaningful change[199]. They continue to point out that the problems of forestry in Nepal continue to be problems of poverty. As such, community forestry has an underlying moral and philosophical position to improve the economic status of rural people, focussing on the poor. This cannot be done merely through the creation of wealth[200], as this can have the direct result of reinforcing positions of authority and influence. This is noted by Mihaly (1965) and Gilmour and Fisher (1991):

> This raises some dilemmas. There is an argument that forestry projects should be concerned with creating wealth, but that questions of equity and distribution should be left to the internal workings of the society to resolve. We disagree. Foreign aid is an intervention in the workings of a society. It changes the balance either consciously or by default. Foreign aid is often seen as reinforcing the *status quo.* We believe that the stated policy of community forestry should be more than mere talk and that programs which supposedly aim to reduce poverty should target the poor (1991:xv).

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[199] For further discussion on foreign aid and the impact of political values of donor countries (i.e. United States, China, Russia and India) on Nepal, see Mihaly (1965).

[200] This is noted by Bodley (1990); Borovy (1971); Cernea (1991); Chilcote (1984); Freire (1993); Gans (1969); Goulet (1971); Harp and Hofley (1971); Hofley (1971); Knippers Black (1991); Lewis (1971); Max-Neef (1992); Pitt, ed (1976); Rahnema (1993b); Schuurman, ed (1993); Seers (1977a, 1977b); Traitler (n.d.); Uchendu, ed (1980); Uphoff (1991); and Waxman (1983).

Fisher (1990a, 1990b), Gilmour (1992) and Gilmour et al (1992) note that in addition to the non-viability of wealth-creation, poverty alleviation also cannot be accomplished through the wholesale implementation of development projects that are not appropriate to the concerns of the local people. Any early indication of village support for a project needs to be weighed against a realistic assessment of the sincerity of the interest and a knowledge of the people-forest interaction and the extent of need. If villagers experience a shortage in resources, they may facilitate the success of outside-sponsored attempts to increase quantity through plantations and nurseries. However, if villagers do not perceive a shortage in resources, these attempts by outside developers may be met with apathy or antagonism.

Development policy in Nepal is affected by the overly zealous notion on the part of environmentalists that Nepal is on the brink of environmental catastrophe, based on the assumption that rapid growth of the subsistence farming population is leading to the destruction of forests for fuelwood. Gilmour (1992) notes that it is "often inferred that all of Nepal has undergone massive deforestation, with the corollary being that all of Nepal should undergo massive afforestation to correct the situation" (ibid:83). This has led to the implementation of large-scale afforestation projects throughout Nepal, concentrating on nurseries and plantations. Whether or not these projects have experienced any measure of success depends on the response of villagers to resource availability. Not all areas are the same in terms of need, so not all areas require the same type of development[201].

What also must be assessed is the validity of existing indigenous forest practices. In my view, there exists a perceptual bias among some development anthropologists and some developers that indigenous forest practices equate favourably with sound silvicultural practices. This is not necessarily the case. In Nepal, Gilmour et al (1992) point out that some indigenous practices may lead to eventual degradation once the older stands are cut or die. This may come about through grazing practices, whereby a loss of regenerating seedlings occurs, or through incursions of local villagers who cut small trees and shrubs for fuelwood and leave the larger trees intact. Neither the grazing or cutting activities encourage regeneration. Gilmour et al note that in cases like this, effective interaction between foresters and villagers can be productive through the development of a management plan that ensures the right of the villagers to use the forest, but specifies ways in which the forest can be managed to ensure long term sustainability. This planning process must, however, be balanced in terms of local and non-local resource harvesters. For example, when use of the forest is confined to the immediate needs of a clearly defined user group, then controls outlined through a management plan seem adequate. When, however, the government gives approval to someone outside the user group to harvest forest resources, the users may not have sufficient strength to object and, as a result, the user group will "frequently join in a splurge of unregulated harvesting, which can lead to the destruction of the resource" (Ibid:86).

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[201] An example of this is provided by Gilmour (1992) and pertains to the perceived indirect benefits of afforestation projects. In one of the villages of the Kabhre Palanchok District, it was found that trees had to be cut down to build the nursery developers said was required, as there were no treeless areas in the vicinity upon which to construct a nursery. When questioned as to where the seedlings would be planted to battle deforestation, the villagers responded that naturally occurring small trees would have to be cut down to make space for the seedlings. Eventually, the village leader came to the conclusion that the village did not have a shortage of trees; however, "they did have water shortages and they thought that if they requested a nursery, a water supply also would be forthcoming" (Ibid:84).

Noted by Gilmour and Fisher (1991), community forestry is a radical concept calling for a radical change in the way that forestry is perceived and implemented. It is therefore unrealistic to assume that community-based implementation will occur just because there has been a higher level policy shift. Substantial institutional changes are required on the part of both community and forestry department to meet new objectives. In this perspective, the forest becomes the means by which development is carried out rather than the end result of the development process. Gilmour and Fisher (1991) point out that in most cases, this will involve changing perceptions and methodologies within government and bureaucracies, as well as within local communities themselves. There are, however, two inherent difficulties with this aspect of change: bureaucratic culture and power[202] and institutional incompatibility. In the first case, noted by Fisher (1990a, 1990b) and Gilmour and Fisher (1991), there exists a tendency on the part of government bureaucrats - who also happen to be foresters - to assume that all relevant knowledge about forests and ways to organize the management of forests rests with them. In the second case, noted by Gilmour and Fisher (1991), the organization which has been given the responsibility for devolving control of forests to local communities also represents the interests of those who have most to gain by maintaining control of forests themselves - the Forest Department. Both of these factors lead to behavioural patterns where individuals avoid making decisions in case they offend superiors or disrupt the role of patronage. These actions result in an environment whereby decision-making often appears to be irrational and illogical in terms of the expressed aims of forest policy[203]. There is also the variable of technocratic knowledge to consider, discussed in Chapter Two, and the impacts of that knowledge on policy implementation:

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[202] For further discussion on political behaviour in Nepal see: Bista (1991); Caplan (1975); and Kondos (1987).

[203] Gilmour and Fisher (1991) note that Max Weber's (1964:339) analysis of the specifically rational nature of bureaucratic administration is not valid in the case of Nepal forest management policy implementation. I daresay it is not valid in most cases of resource management - including resource management in the Province of Alberta.

> ...one major point which is central...is the importance of personal relationships in official decisions. The reason for this is the extent to which powerful people can intervene directly in the lives of their clients and provide them with favours. The client then owes his patron reciprocal obligations. This again leads to all manner of hidden agendas being pursued through complex sets of obligations and counter obligations...can often give rise to a rather cumbersome and circuitous process of obtaining relevant information and making decisions (Gilmour and Fisher 1991:188-189).

Nepali community forestry has demonstrated that development projects should take into account local knowledge, organizations, and aspirations at all stages, and they should be designed to deliver benefits to people directly involved with local land use. The past must be taken into account and learned from:

> Past experiences must serve as lessons for Nepal in formulation and implementation of forestry policies. Identification and analysis of problems and potentials, adoption of appropriate policy instruments and fair implementation of this policy will all need to be attained to meet peoples' needs as well as to contribute to economic welfare and environmental sustainability in the future (Gilmour and Fisher 1991:90).

B. Zimbabwe

There are attempts in Zimbabwe to combine human and social needs with environmental and forestry concerns, within a national macroeconomic and structural context. There is also an attempted integration of national concerns with local needs and perspectives, representing a bridging of the gap between the concerns of the state and the more localized perspectives of local communities. The guiding principle is the need to enhance woodland conservation while at the same time, ensuring its productive and sustainable use (McNamara 1993). This means taking into account both the market and non-market value of trees as:

> Conventional methods of national accounting, which suggest that Zimbabwe's forest resources contribute about 3 percent of gross domestic product (GDP), greatly understate the many indirect ways in which indigenous woodlands and trees contribute to the improvement of food security, to meeting rural subsistence needs, to the generation of rural income, to agricultural productivity, and to protection of the environment (Ibid:1).

In Zimbabwe, agricultural and other land-use policies such as those pertaining to mining (Nhira and Fortmann 1993; Scoones and Matose 1993) have failed to take into account the indirect contributions of forest resources to the national economy. Consequently, woodland conservation and management has been given a low priority in government development plans, and their potential for contributing sustainable agriculture and environmental protection largely ignored. Currently there are a number of legal constraints to peoples' involvement in woodland management, which have a long history.

Noted by Nhira and Fortmann (1993), Metcalfe (1994), and Scoones and Matose (1993), prior to colonization all land was held communally[204]. Following colonization, indigenous systems of communal resource management were nullified and natural resources made state property. Satisfying industrial interests, early in the colonial era the powerful mining lobby began extracting timber for mining activities. This continued until the declining influence of the mining lobby in the late 1940's, which led to an increased interest in establishing a regulatory framework for the emerging agricultural sector, requiring the clearing of forest land. In addition, land was required for the curing of tobacco - again, cleared land was required. This period between the 1930's and 1960 was one of directed planning with minimal consultation and is described by Scoones and Matose (1993) as one of planned development directed by the state. In the late 1970's, a perceived woodfuel crisis became the dominant theme of debate. While in hindsight it was noted as alarmism, in that deforestation and the impending crisis both were overstated, this period produced ill-informed and inappropriately designed policies and projects that further restricted activities on communal woodlands.

The post Independence experience has, in many respects, been similar to earlier periods, as land clearance for cultivation and wood extraction for daily use have increased over time and local institutional structures have remained weak. Scoones and Matose (1993) point out that:

> ...many of the debates surrounding forestry policy for the past sixty years apply today. The same arguments and justifications of watershed protection, biodiversity protection and timber self-sufficiency that were employed by Forestry departments in the 1920's for the maintenance of the forest estate are used in contemporary discussions (Ibid:162).

Nhira and Fortmann (1993) note, for example, that commercial timber harvesters cut vast tracts of trees for railway sleepers and the mines. The colonial government forced local people to build houses in straight lines, which meant the use of considerable amounts of timber for poles and brick making, and to clear and destump indigenous woodland for arable fields. The Unilateral Declaration of Independence government deliberately deforested parts of the communal areas in order to reduce the cover for the liberation fighters. None of these factors, combined with legislative and regulatory regimes and interventions, were "... particularly conducive to the evolution of sustainable natural resource management" (Scoones and Matose 1993:160), nor did these factors lead to cooperative management arrangements between industry, government, and local woodland users. The development of more realistic woodland management regimes reflecting the need for local control is complicated by contrasts with the *de jure* and *de facto* control and management of woodland areas. There are a number of sources of tenurial conflict over both land and trees in Zimbabwe and it is noted (McNamara, 1993; Nhira and Fortmann, 1993; Scoones and Matose 1993) that since land and tree tenure are not always synonymous, conflict over use rights may emerge as different people claim rights over trees and their products, as well as over the land on which the trees are found. This is referred to as an overlapping tenurial niche[205], which usually leads to resource conflict[206]. There are a number of institutions and roles that are pertinent to each category of lands. For purposes of this research, communal woodland in communal areas is noteworthy.

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[204] Communal ownership today means the state legally owns the land and manages it through, for example, line agencies, each of which is responsible for its own sector. A Ministry, such as local government, coordinates the activities of the line agencies (Metcalfe 1994).

Woodland use in Zimbabwe communal areas is usually a case of common property management, not of simple open access whereby no exclusion rules operate and access to resources is open to anyone. Scoones and Matose (1993), Bromley and Cernea (1989), Swallow (1990), and Swallow and Bromley (1992) point out that in the development of policy and appropriate institutional structures for successful local level natural resource management, the following characteristics of a common property regime apply: no single individual has exclusive rights to the use of the resource; group members have secure expectations that they can gain access for future use; there are functioning membership criteria; there are communally defined guidelines for resource use; and there is an enforcement mechanism for punishing deviant behaviour. Scoones and Matose note, however, that in many cases in Zimbabwe, common property management of woodland areas is weak, with limited exclusion, some accepted rules about use and management, and a failure to enforce rules. The false reasoning portrayed in Hardin's "tragedy of the commons" (1968) does not acknowledge the opportunities for collective management of resources held in common versus the open access notion and subsequent "unregulated individualistic competition" that "reinforces forest depletion" (World Bank 1990). Unfortunately, as noted by Scoones and Matose, this myth is still common in many policy discussions in Zimbabwe, owing to weak management of common property woodland resources. The result is that the potential for successful common property resource management of communal woodlands is undermined by political and administrative uncertainty at both local and state levels.

In Zimbabwe, however, the case for common property woodlands management is developing and is gaining strength. Flowing from extensive analyses, research and communal fieldwork regarding common property resources and woodlands management, Scoones and Matose (1993:175) note the following additions to effective common property resource management: the recognition of common objectives for management that can cut through local conflict and differentiation; the introduction and acceptance of resource management rules that are based on local knowledge and practice; the strengthening and empowerment of new and traditional local institutions; the need for local communities to gain direct benefits from investment in resource management; the need for a broad and flexible regulatory framework; and the negotiation of comanagement agreements with external authorities where different responsibilities and commitments are mutually agreed upon. Murphree (1991) cited in Scoones notes:

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[205] Nhira and Fortmann (1993) note six such niches in Zimbabwe: forest land controlled by the state; trees controlled by District Councils on communal land; indigenous woodland in communal and resettlement areas; trees planted by groups and institutions; trees planted and protected by individuals on individually controlled land; and trees on commercial farms. Most villages occupy more than one niche.

[206] This is an extremely complex area which is beyond the scope of this thesis. For further discussion see: Bruce (1990); Cusworth and Walker (1988); Moyo (1992); Scoones and Matose (1993); World Bank (1990), and others.

> The evidence is that communities can become effective institutions for sustainable resource management, but only if they are granted genuine proprietorship, i.e. the right to use resources, determine the mode of usage, benefit fully from their use, determine the distribution of such benefits and determine rules of access. Any policy which excludes these components will frustrate the goal of making communities effective institutions for resource management (Scoones and Matose 1993:175).

It must also be briefly noted, however, that the issue of community management of woodland in resettlement areas and state forest issues is also critical to forest management in Zimbabwe as "Many of the dilemmas currently faced are intimately bound up in the wider issues of land access and control". Moyo (1986, 1992 in Scoones and Matose 1993) goes on to state that the inherited patterns of land allocation in Zimbabwe impose enormous pressures on resource use in the low potential communal areas. This has spill-over effects on adjacent lands made up of resettlement areas, state forests, parks, and commercial farms. This is important as land use planning in resettlement areas does not include woodland management or use, as it is based on cropping and livestock packages for settlers. The emphasis has been on clearing land for agriculture; as such, use of the extensive woodland resources within resettlement areas has not been widely explored. Forestry "only enters the plan in the form of a standardized village woodlot of gum trees" (Scoones and Matose 1993:166).

Nhira and Fortmann (1993) note three special problems faced by resettlement schemes with respect to woodland management: they have to live with the results of management decisions of the commercial farmers who previously owned the land. Secondly, they are constrained by the rules of the resettlement authority (e.g. removing all trees from arable fields). Thirdly, they must struggle to establish and protect their rights to the trees on the land against the claims of the residents of the adjacent communal areas - essentially, this amounts to wood poaching.[207] Further, resettlement communities suffer similar weaknesses in institutional structures as described for communal areas. It is noted by Scoones and Matose (1993) that there are no existing structures of authority with which any new institutions can articulate, complicated by the fact that settlers come from a wide variety of backgrounds, as settlement initially focused on the provision of land for those with limited assets, and are inexperienced in leadership. The result has been that:

> ...settler communities have found it difficult to exclude those wanting to make use of the resettlement area woodland resources for wood collection, grazing and so on (usually neighboring communal area people). Similarly, it has been difficult to sanction settlement members for collaborating with outsiders in the extraction of wood...
> The result has been the effective breakdown of exclusion rules and the evolution of a practically open access situation, where resettlement areas are open to anyone (Ibid: 166).

It is suggested that these areas would benefit from more emphasis on institutional development, rather than service provision[208].

Nhira and Fortmann (1993) are careful to point out that there cannot be a single blanket forestry policy implemented in Zimbabwe, as it is necessary to examine the social and ecological diversity of any forest, and meet the needs through a diversity of policies and approaches. They stress also that the urgent need to establish and strengthen sustainable management should not lead to the implementation of government-dictated rules. Instead, the rules for forest use should be evolved and enforced locally. Further, the task of the government on communal land should be to provide technical assistance and guidance to ensure that management regimes developed will actually lead to sustainability as "(t)he power of the state should be put behind locally generated regimes (Ibid:153).

V. Resource Management Models in Non-Forest Sectors

There are many resource management issues throughout the world, in a variety of sectors, in a range of geographic locations. It is not possible to review all of them. The following have been included as I have found them to be most relevant to my research.

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[207] Nhira and Fortmann (1993) note that the wood poachers interviewed reported that they could not request access to the woodlands as they were not gathering from anybody's fields, nor did they know whom to ask for permission. They asserted that they had used the woodlands when the farms were still private property and they claimed that the area rightfully belonged to them. Some resettlement scheme residents said that they were reluctant to stop the poaching since they relied on the boreholes in the village of the poachers for their water supplies. Thus far, resettlement authorities have been unable to stop the poaching. Any controls that operate are said to be adhered to by resettlement scheme residents only (Ibid:149).

[208] For an extensive discussion of tenure and resettlement issues see: Bradley and McNamara (eds); Nhira and Fortmann (1993); Moyo (1986, 1992); and Scoones and Matose (1993).

A. Latin America Conservation Areas

These case studies were carried out by Peter Poole (1989) for the World Bank. It was originally hoped that Poole's work would result in a "how to" book which would draw upon resource management experiences of others, and provide planners with a guide to design areas which combined traditional land-use practices and conservation objectives. This was not feasible, however, as many projects were at an experimental stage and not ready to be generalized. His final report was based on ten Latin American case studies, from which the major findings were synthesized. Poole demonstrated an alliance of conservationists and indigenous peoples in the protection and management of fragile and threatened ecosystems, based on a convergence of interests[209]. The traditional paradigm whereby indigenous peoples were allowed to continue to occupy and use the resources of protected areas[210] - as long as the resources were used sustainably - was effective until the needs of the indigenous peoples and conservationists collided[211]. When park authorities and indigenous peoples did not agree, then one or the other was encouraged to move. Essentially, the approach tended to exclude human activity or accepted it only under severe conditions and it became necessary to reconcile the needs of both indigenous peoples and conservationists. The concept of the biosphere reserve was used based not on a set of rules or a theory of indigenous acculturation, but based on a partnership. This is an excellent example of joint resource management, as the biosphere concept represents:

> ...typically complexes of conservation units that include fully protected areas such as national parks as core areas (surrounded by) buffer zones in which varying intensities of resource exploitation are permitted as long as they sustain both the local economies and the biodiversity of the core areas (Poole 1989:1).

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[209] For further readings on Latin American case studies and the biosphere concept see: Batisse (1986); Bernhardson (1986); Bodley, ed (1988); Burger (1987); Clad (1985); Davis (1988); Glick and Betancourt (1983); Houseal et al (1985); Jungius (1976); Ledec and Goodland (1988); Thibodeau and Field, eds (1984); and Western (1984).

For readings on parks and protected areas generally see: Bailey (1994); Johnson (1994); Johnson and Johnson (1994); Kassi (1994); Murtha (1994); and Nelson and Sabine (1984).

[210] A protected area, referred to as a conservation unit, refers to habitats which have been legally set aside for the protection of their biological diversity, including: national parks; wildlife reserves; ecological stations (Poole 1989).

[211] This "collision" occurs when major deforestation activities or firearm hunting for commerce is carried out by indigenous peoples. These activities are not compatible with wildlands protection (Ibid).

As noted by Poole (1989), the convergence of interests between indigenous peoples and conservationists had certain limitations, based on the assumptions, expectations, and ultimate objectives of the stakeholders. For the indigenous stakeholders, the conservation project had to make local sense in social and economic terms. For the conservationists, attitudes towards indigenous resource use varied widely, but usually were based on opposition to the principles of aboriginal hunting rights and animal utilization. To the non-government organizations (NGOs) and outsiders, conservation units were no longer the sole objective of environmental conservation efforts, and were to be treated as integral elements within a complex of areas. These areas reflected the needs and ambitions of a variety of stakeholder interests within the conservationists and indigenous users which, in turn, increased the number of variables in the conservation process. Flexible and dynamic planning and management methods were required that balanced ecological factors with economic use in a pragmatic manner, taking into account activities being carried out in adjacent areas:

> The World Conservation Strategy recognizes that the survival of national parks as protected areas may ultimately be jeopardized by the activities pursued in the surrounding areas, however effective the protective measures themselves may be. If the productivity of these surrounding areas is reduced through unsustainable exploitation, this may reduce park biodiversity through ecological isolation and also cause the residents of the depleted zones to infringe on the conservation unit (Ibid:2).

As a result, the development of methods of resource utilization in areas outside the conservation unit that tended to conserve biodiversity were encouraged by the NGOs. The UNESCO-MAB Biosphere Program evolved a planning framework capable of accommodating both protected areas and those with compatible forms of resource use.

The shift in attitudes and perceptions held by the stakeholders in this process did not come easy: there were major difficulties and challenges inherent in creating such a partnership between conservationists and indigenous peoples. To facilitate this accommodation, the NGOs became involved in mediation and reconciliation functions between the conflicting interests. The indigenous communities appeared more willing to trust the NGOs than they were to trust government officials or conservationists. The government and conservationists viewed the NGOs as somewhat neutral parties in the discussions. After substantial consultation and discussion, the NGO's found areas of common interest. A pragmatic conservation was defined that centered around attempts to find ways of adapting traditional practice while conserving the resource base, and was acceptable to both stakeholders and satisfied the range of interests among stakeholders. Following further discussion and negotiation, agreements were worked out between indigenous peoples and conservation authorities for the mutual protection of threatened wilderness areas and endangered habitats - through the creation of buffer zones. Wildlands planning and management were shifted to a partnership approach with surrounding communities and incorporated "vernacular economics"[212] (Ibid.) into buffer zone activities. This was based on the recognition on the part of conservationists that indigenous environmental knowledge needed to be integrated into regional planning efforts if sustainable management and conservation efforts were to succeed. Ten primary areas of activity were placed into three general categories of protection, economics, and operations. These areas were looked at within the context of limited financial resources, even though Latin American governments maintained that conservation areas did not need to be self-sufficient.

i. Protection

Physical protection includes the enforcement of agreement provisions. In the absence of funding and enforcement from the state, most of the communities living in reserved areas have assumed these responsibilities themselves. Informal methods have an advantage over the conventional park wardens: they avoided situations whereby individuals have to enforce regulations against other members of the community outside of traditional authority systems. Successful public education is also called for as a measure of protection, required to change attitudes held by those who live within the reserve area, among adjacent communities, and those who work at the national government level. Impact management refers to the assessment, monitoring and mitigation of the environmental and socio-economic effects of industrial development. In Latin America, the specific cases pertain to mineral and energy development on reserved lands that cannot be completely prevented - only moderated.

ii. Economics

Compatible resource utilization, whereby forms of resource utilization which have a conservation effect and are applicable to varying degrees within the biosphere reserves, are employed. Traditional practices falling within these guidelines are considered as acceptable for core areas where indigenous people reside within national parks. More manipulative methods are limited to buffer zones, representing a "continuum of management" (Ibid). Recreational development is another area of economic concern, particularly by those indigenous peoples who have been treated as a tourist spectacle or source of cheap labour, and the issue remains contentious. The financing of these processes is the third economic consideration.

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[212] The vernacular economy is noted as the mixed cash-subsistence economies which have often evolved locally where indigenous and industrial economies have come into contact and present a viable third option in economic terms, while at the same time contributing towards wildland conservation (Poole 1989).

iii. Operations

This area includes indigenous organizations and their usefulness in ensuring that community interests are adequately represented and adequately resolving internal differences. This also includes a highly effective system of conservation project support, as well as national conservation and indigenous people's NGOs, which are under greater pressure to produce results in order to remain in existence. Area research is another component of operations, as management plans cannot be adequately drafted nor implemented without accurate research. Training is very important and involves training people living in and near conservation areas to assume work on management and operations. The last area of consideration is management and planning. A great deal of effort had gone into planning some of these areas using established procedures of inventory and zoning. The primary goals of management in most Latin American conservation areas have, however, been limited to full protection, which is beyond the resources of some administrations. Poole (1989) notes, however, that the planners were forced to assume that the resources would be available to put the plans into effect.

B. Mineral Development Agreement: The Northern Territory and Queensland [213]

The romanticized view held by many Canadians, that industrial development such as mining and forestry is not wanted within Aboriginal traditional territories nor on reserve lands, is held by many Australians as well, noted by Hill and Press (1994) and O'Faircheallaigh (1995a; 1995b). The negotiation of the mining agreements in the Northern Territory and Queensland is dispelling this myth, as Aboriginal communities are clearly showing their willingness to find ways of facilitating mineral development, while looking for ways to benefit from it. In addition, O'Faircheallaigh (1995a, 1995b) notes that the process of negotiating mineral agreements also discredits the view that recognition of Aboriginal rights automatically creates barriers to resource exploitation - a view promoted by some sectors of the media and mining industry.

Mining Exploration and License Agreements in the Northern Territory and Queensland are negotiated with a view to: ensuring that traditional land owners gain some benefit from mineral exploration activity on their land, and to minimize adverse effects from exploration activity; and to provide as much certainty as possible regarding the development of any commercial mineral deposits which are discovered, including benefits[214]. The mechanism for negotiation is a standard form contract which is modified through consultation and negotiation processes. Parameters may include: the protection of the environment and significant historic and spiritual sites; provision for a "fly-in fly-out" (Ibid:4) mode of development as opposed to the development of a conventional township and associated facilities; the establishment of liaison committees to maintain communication between the indigenous land owners and the exploration company, and supervise site clearance; monitoring of environmental, cultural and social impacts of development; financial provisions for annual rental payments and negotiated royalties; and employment and training commitments.

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[213] Legislation and regulation surrounding land ownership and use in the Northern Territory and Queensland is voluminous and is outside of the scope of this thesis. For further discussion and information, see: Altman (1983, 1994, 1995); Altman, Bek and Roach (1995); Chase (1996); Lane (1996); McKenna (1995); Neil (1996); O'Faircheallaigh (1988); Sanders (1994, 1995); Smith (1996); Stephenson and Ratnapala (1993); and Sullivan (1995).

There is a marked distinction, noted by O'Faircheallaigh (1995a, 1995b) between the agreements[215] negotiated between Aboriginal people and mining companies that require developers to obtain Aboriginal consent, and those which do not require this consent. Not surprisingly, agreements tend to incorporate substantial benefits - particularly related to royalties and other economic benefits - where consent is required. Control over the environment and issues of heritage are also dealt with more favorably where consent is required prior to development taking place. These agreements are also generally funded by the developer, rather than by the government.

O'Faircheallaigh notes three criteria which can usefully be employed to evaluate agreements: 1. the extent to which an agreement reflects an effective mobilization of Aboriginal bargaining power. This criteria allows for the possibility that good agreements may be negotiated even in the absence of significant bargaining power; 2. judging the extent to which an agreement meets community aspirations. This takes into account the wishes of traditional land owners; and 3. the extent to which agreements serve to establish precedents influencing the broader negotiating environment and, therefore, the capacity of other indigenous people to subsequently achieve their objectives.

C. Kakadu National Park

The Kakadu National Park located in the Northern Territory of Australia was formed amidst intense emotion as a result of many competing interests in the park's lands and resources. Noted by the Australian Nature Conservation Agency (1991); Fox et al (1977); Hill and Press (1994); Knapman et al (1991); Skeat (1986); and Weaver (1991), these competing interests included: mining and conservation; mining and aboriginal interests; pastoral activities and conservationists; tourism and conservation; conservation and aboriginal interests; and aboriginal interests and tourism. Overlying these issues was the Northern Territory Government's fundamental opposition to the involvement of the Australian commonwealth government and, particularly, the Australian National Parks and Wildlife Service (ANPWS) in the Kakadu area.

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[214] For further discussion see: Altman (1983, 1994, 1995); Connell and Howitt, eds (1991); Gray (1980); Holden and O'Faircheallaigh (1991, 1995); Howitt (1987); O'Faircheallaigh (1988); Stock and Lane (1994); and Sullivan (1995).

[215] The agreements analyzed include the following: Mt. Todd Agreement concluded between the Jawoyn Association, the Northern Territory Government, and Zapopan NL; the McArthur River Agreement between the local Aboriginal groups, the Commonwealth government, and the Gurdanji-Bingningba Aboriginal Corporation; the Cape Flattery-Hope Vale Agreement concluded between the Cape Flattery Silica Mines (a fully-owned subsidiary of Mitsubishi Corporation) and the Hope Vale Community Council; the Mapoon-Skardon River Agreement between Venture Exploration NL and Marpuna; and the Placer Pacific-Kalkadoon Tribal Council Agreement.

Mining interests had always been intense in the area, and as a result of the 1970 formal proposal submission to the commonwealth government to mine uranium at Ranger and subsequent inquiry, the commonwealth granted aboriginal title to the land and provided for the establishment of a major national park[216]. The concept of a national park on Aboriginal land was untried in Australia prior to this decision. Implementing the park concept required the negotiation of appropriate terms and conditions under which the Aboriginal land could be leased to the director of the ANPWS, thereby allowing the land to be declared a national park. Noted by Hill and Press (Ibid), the negotiations over the lease agreement were intense not because there were unresolvable issues at stake, but because the commonwealth government chose to include the lease agreement in a package of agreements it was negotiating on uranium operations. Nevertheless, the lease was completed and Kakadu National Park proclaimed. By this time (1978), the Northern Territory had achieved self-rule and strenuously opposed the official proclamation of the park and the co-management arrangements that went with it.

The establishment of co-management regimes has occurred in an environment of extreme and sustained political sensitivity. Throughout park history, the Northern Territory government has sought to gain control and remove the ANPWS. The intention of the government has been to support major commercial development, including mining, in Kakadu without any apparent consideration of the traditional Aboriginal owner's point of view. It is noted by Hill and Press (1994) and Poole (1989) that the success of the park may be based, in part, on the fact that the Northern Territory was (and is) constantly attacking it: for example, while all of the Aboriginal people living in the park did not hold the same views on many matters, the traditional owners and their representatives were consistent and strong in their support for the involvement of the ANPWS. Hill and Press (Ibid) point out that one of the major areas of disagreement was between the traditional owners and conservationists on mining activities:

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[216] This process was arduous, to say the least, and the movements of the stakeholders intricate. For further reading in a summary form see Hill and Press (1994).

> National and local conservation groups have opposed mining in the Kakadu region strenuously and vociferously...In opposing mining, they have partially succeeded in forming a coalition with the Aboriginal people. Although conservation groups implacably opposed all mining in the region, the Aboriginal people do not. While the Aboriginal people are pleased to see mining and exploration generally prohibited within the park, they are conscious of the very substantial financial benefits that may accrue to them if mining proceeds...(Ibid.:142).

Co-management involving the traditional Aboriginal landowners is facilitated through a hierarchy of statutory instruments, conditions of lease, and management arrangements. For purposes of this research, only the latter category is discussed.

A Board of Management operates the co-management system in Kakadu National Park and is composed of: ten Aboriginals selected by the traditional owners; the director of Parks and Wildlife; the regional ANPWS executive; an ecologist; and a tourism expert. Aboriginal representation reflects the geographic spread. Formal and informal liaison arrangements[217] include: local meetings to discuss specific issues; employment of aboriginal cultural advisors to serve as liaison between the ANPWS and landowners; and the employment of youth in park management. The responsibilities of the Board include: management plan preparation; decision-making consistent with the management plan; the monitoring of the park; and the giving of advice to the Minister on all aspects of the future development of the park. Areas that are co-managed include: cultural resources, such as oral cultural heritage, historic sites, rock art and archaeology sites, and sacred sites; habitat including studies on soil, water, and fire ecology; feral and introduced animals; native fauna and flora; and the management of weeds and introduced plants. Key management objectives include: to establish a plan of management in which Aboriginal people play a major role; to provide special protection to sites significant to Aboriginal people; to rehabilitate areas damaged by feral and introduced animals and plants, and other recent human impacts; the development of an inventory of all relevant resources in the park; to cooperate with neighbors in complementary management programs to protect park resources; the stimulation of interest in nature conservation and Aboriginal culture by the development and implementation of communication programs; the protection of the park resources from the undesirable consequences of fire, erosion, environmental change, pollution, and other activities of people.

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[217] There are a number of associations of traditional owners noted by the Australian Nature Conservation Agency (1991) including: the Northern Land Council representing the Kakadu and Jabiluka Land Trusts; the Gagudju Association of traditional owners; the Djabulukgu Association representing traditional owners of the Jabiluka Land Trust area; the Jawoyn Association established to represent the interests of the Jawoyn community who are regarded in Aboriginal tradition as the traditional owners of the bulk of the southern area of the park; a consultative committee of traditional owners representing communities throughout the park; cultural advisors, who are senior traditional owners permanently employed on the park staff; and Aboriginal park staff. Other consultation arrangements are carried out on specific issues as they arise.

The Australian Nature Conservation Agency (1991), Hill and Press (1994), Hallam (1975) and Lewis (1991) note that the greatest challenge for the future of the park is to address adequately and reconcile the sometimes conflicting demands of tourists, Aboriginal culture, public servants work practices, and traditional conservation. As such, the process of co-management needs to be clearly defined and, while the expectations of each stakeholder will not be clearly identical, each must appreciate and respect the viewpoint of the other. Commitment to the success of the project, noted by Hill and Press (1994), is critical in any cross-cultural situation in which complex and sensitive problems, that are not normally experienced in more common conservation programs, often arise. Part of the success of the co-management of the park lies in the fact that management processes address Aboriginal empowerment as the social and political processes opened up by the co-management initiatives in Kakadu go well beyond the local community: "...empowerment of indigenous of local people through legal ownership of some or all of the land involved and ensuring that they have the principal role in the decision-making process (for example, through a majority on the board of management) is vitally important..." (Hill and Press 1994:156). Hill and Press make one further point regarding the nature of Kakadu National Park and its implications for future co-management initiatives:

> Success of the park may be based, in part, on the fact that the Northern Territory government is constantly attacking it...Despite (or possibly because of) this controversy, Kakadu National Park has survived and flourished. More important, it has been a beacon in guiding nervous and uncertain people and institutions toward a concept of comanagement of other protected areas in Australia (Ibid:149).

VI. Management Models in Other Areas

It is evident that there is a vast literature pertaining to co-management, cooperative management, joint management and other management systems in both Canada and the Third World. This literature also includes a number of Canadian land claim agreements which are based on principles of land use and occupancy, subsistence and commercial uses of resources, sustainable development, and meaningful economic development[218]. In addition to the sectors noted previously (forest management, parks and protected areas, mining interests, for example) there are three substantial bodies of literature that have not been included: marine mammals; fisheries and watersheds; and wildlife. All of these sectors are reviewed within the context of the validity of all relevant forms of knowledge,[219] the context of sustainable development, and the need for non-confrontational approaches to renewable resource management.[220]

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[218] For particularly clear examples of co-management strategies and processes outlined in land claims agreements see: *The Western Arctic Claim: the Inuvialuit Final Agreement* (1985); *Gwich'in Comprehensive Land Claim Agreement Vol 1* (1992); *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada* (1993); *Champagne and Aishihik First Nations Final Agreement* (1993); *First Nation of Nacho Nyak Dun Final Agreement* (1993); and the *Vuntut Gwich'in First Nation Final Agreement* (1993).

A. Marine Mammals

A number of studies have been done on Alaskan and Inuvialuit Beluga whaling co-management regimes and the co-management of whales and other marine mammals in general (Adams et al 1991; Andresen 1993; Caulfield 1994; Doubleday 1994; Freeman 1989, 1993; Gamble 1993; Langdon 1989; Richard and Pike 1993). Issues include: subsistence harvesting; the effectiveness of management institutions; power and knowledge; the use of indigenous knowledge in management strategies; commercial activities; Whaling Commissions; conservation and protection; and the use of indigenous knowledge in co-management.

Salient management principles include the following: 1. only those representing the beluga/whaling regions should have a vote on matters directly related to whale hunting, while the co-management committee, as a whole, should be allowed to vote on other issues. Those who take part in co-management initiatives must be localized as opposed to representing distant jurisdictions; 2. noting the example of the shifts in policy and structure of the International Whaling Commission from its early years, a strong emphasis on the formal structures and goals of organizations involved in co-management of marine mammals should be avoided as organizations vary considerably over time; 3. the use of indigenous knowledge is critical to successful co-management of marine mammals. In Greenland, for example, there appears to be little profit motive among the Inuit in the harvest of whales. Emphasis is placed on the position of whales in cultural, spiritual and subsistence use. Co-management approaches to whales that incorporate the experiences, knowledge and needs of resource users will be more effective in addressing conservation issues and will provide for sustainability and equity in resource use; 4. subsistence resource usage serves cultural, social and spiritual purposes that industrial enterprises do not consider. As such, these factors must be considered in an analyses and implementation of co-management regimes that give consideration to commercial enterprises; and 5. indigenous resource users must have full participation in research regarding stock status and the best practices regarding stock management. Full participation is necessary for effective conservation and management.

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[219] See Chapter Two.

[220] For references specifically pertaining to this issue see: Axon (1994); Gosse (1995); and Judd (1978).

B. Fisheries and Watersheds

There is an extensive body of literature on the co-management of fisheries and watersheds, noted by Cohen (1989), Dale (1989), Jentoft and Kristoffersen (1989), Kearney (1989), Kellert and Ebbin (1993), Morrell (1989), Paisley et al (n.d.), Pinkerton et al (1993), Richardson and Green (1989), Sewell (1986), and Wheeler (1988). Issues noted include: dispute resolution; stock determination and management; competing interests between and within groups; competing and divergent value systems; organizational structures; and conflict resolution.

Salient principles are summarized as follows: 1. it is far more effective to emphasize cooperation, as opposed to litigation, in the management of fish stocks, fish habitat, and commercial fisheries. Contradictory value systems among stakeholders have to be managed in a fair and equitable manner. Generally, it is true that agreements negotiated by stakeholders with common priorities and backgrounds have a better chance of success. The will on the part of all users to incorporate the concerns, philosophies and needs of the other users in the management of the resource is critical to success; 2. indigenous resource users must have active roles in the management of fisheries, as well as fish stock enhancement programs. Human subsistence needs and sustainable harvests must both be satisfied if a co-management structure is to be successful; 3. the development of consensus-building mechanisms is critical to successful co-management. This includes skills development among co-management partners, user group conflict resolution processes, and resource allocation strategies and frameworks. Further, it must never be assumed that stakeholder groups are homogeneous. In addition to the differences in priorities and positions between fishermen and government officials, there are also differences between fishermen; 4. stakeholders and researchers must be aware that in co-management, there is the potential for co-optation; 5. economic incentives to co-management must be ensured among the stakeholders; 6. effective co-management requires adequate attention to the quality of the process rather than a single-minded focus on outcomes; and 7. co-management success depends, in part, on adequate management capacity.

C. Wildlife Management

As with fisheries, there is an extensive body of literature on the management of wildlife. The summary of co-management issues in this section includes: Cizek (1992), Clancy (1990), East (1986), Feit (1988), Green, ed (1986), Gunn et al (1988); Hassler (1995), Kassi (1994); Keith and Neufeld (1988), Lloyd (1986), Osharenko (1988), Taylor (1995), Therrien (1988), Usher (1986) and Wacquan (1986). Issues noted include: conservation and environmental planning; commercialization; indigenous knowledge and cooperative management; legislative authorities; self-management versus state-management; sustainable development; wildlife control and use; the gap between traditional knowledge and western science; devolution; and land-use planning.

The guiding principles taken from this review are as follows: 1. traditional resource users, governments, commercial users, and wildlife officials would do well to participate together in the management of renewable resources; 2. local users must be part of any management structure, whether they are aboriginal or not. Further, as many aboriginal leaders and resource users have undertaken *de facto* management of their resources, they must be included in any joint management structure developed; 3. whether co-management will be successful or whether it will lead to co-optation and domination that weakens self-management will depend on whether the autonomy of aboriginal self-managers is recognized by government, and whether their participation will be treated with equal authority, legal standing, resources, and respect; 4. the knowledge of hunters must be taken into account and integrated with biologists' knowledge in the co-management of wildlife. Hunters have gained increased political influence, which may lead to a more cooperative approach to management and exchange of knowledge between the stakeholders. The key to effective wildlife resource co-management may be more effective communication between hunters and biologists; and 5. co-management arrangements in which governmental authorities share power with indigenous user groups offer the best prospect for solving problems, as the indigenous system of management has limited application, and the state system has never worked well.

APPENDIX L

TRILATERAL AGREEMENT

THIS AGREEMENT IS MADE BETWEEN:

> The Algonquins of Barriere Lake (having an administrative office at Rapid Lake reserve), represented by their duly authorized Chief, Mr. Jean-Maurice Matchewan;

AND

> The Gouvernement du Quebec, represented by Mr. Christos Sirros, Minister for Native Affairs, and Mr. Gil Remillard, Minister for Canadian Intergovernmental Affairs, Mr. Albert Cote, Minister of Forests and Mr. Gaston Blackburn, Minister of Recreation, Hunting and Fishing (hereinafter referred to as "Quebec");

AND

> The Government of Canada, represented by Ms. Monique Landry, Minister of State for Indian Affairs and Northern Development (hereinafter referred to as "Canada").

WHEREAS the Brundtland report put forward the notion of sustainable development;

WHEREAS Quebec and the Algonquins of Barriere Lake wish to ensure, on the territory currently used by the latter and included in Annex 1 and in Annex 2, the rational management of renewable resources in view of making possible, with a concern for conservation, their versatile utilization, and the pursuit of the traditional activities by the Algonquins of Barriere Lake;

WHEREAS Quebec and the Algonquins of Barriere Lake wish to engage in the preparation of a draft integrated management plan for renewable resources (forests and wildlife) within the framework of a pilot project, in view of making sustainable development possible in the above-mentioned territory;

WHEREAS the experience gained as a result of this pilot project can be applied to other territories in Quebec;

WHEREAS Quebec has already expressed the desire to work with the Algonquins of Barriere Lake in the preparation of this management plan;

WHEREAS Quebec has taken certain measures making it possible to carry out this management plan;

WHEREAS Canada, having a special fiduciary responsibility towards the Algonquins of Barriere

Lake, wishes to support them in this undertaking;

WHEREAS the Algonquins of Barriere Lake and Hydro-Quebec are examining the possibility of studying the impacts of the operation of the Baskatong, Cabonga, and Dozois reservoirs;

THEREFORE THE PARTIES AGREE TO THE FOLLOWING:

1. The parties within their respective jurisdictions, agree to initiate a trilateral process in view of enabling Quebec and the Algonquins of Barriere Lake to prepare a draft integrated management plan for renewable resources (forests and wildlife) with regard to the territory included in Annex 2 and to propose means to carry out the plan. The plan will be prepared with the objective of sustainable development.

2. Within the framework of the trilateral process, the following is to be carried out:
   Phase one: the analysis of existing data and, when required for the completing of information, the inventory of renewable resources (forests and wildlife) within the perimeter of the territory included in Annex 2 of the present agreement, a study of their utilization, potential and the impacts and the interaction of activities related to their exploitation and development;

   The works contemplated by phase one will be done in two stages:
   a) with respect to that part of the study area covered by vertical lines in Annex 2 of the present Agreement (study area A), the works will commence immediately; and
   b) with respect to that part of the study area covered by diagonal lines in Annex 2 of the present Agreement (study area B), the works will commence within one year from the date this agreement comes into force.

   However, the parties agree that the Algonquins of Barrier Lake may propose the exchange of any part or parts of the territory within study area A for any part or parts of the territory of equal size within study area B.

   Phase Two: the preparation, with regard to the territory included in Annex 2, of a draft integrated management plan for renewable resources as defined in section 1, for the purpose of making their sustainable development possible.

   The special representatives may, proceeding from the draft integrated management plan, put forward management principles that could apply on the territory viewed by Annex 1.

Phase three: the formulation of recommendations for the carrying out of the draft plan prepared by Quebec and the Algonquins of Barriere Lake during phase two; these recommendations may aim at modifying, in the territory included in Annex 2, management and exploitation methods, administrative and contractual adjustments and amendments to regulations or laws.

The special representatives may, proceeding from the draft integrated management plan, put forward management principles that could apply on the territory viewed by Annex 1.

3. In the framework of the trilateral process, each party assumes its own representation costs. Common costs of organization (offices, secretary, etc.) are shared in equal parts by the parties.

The costs of expertise and professional services are shared in equal parts by Quebec and the Algonquins of Barriere Lake.

At the request of the Algonquins of Barrier Lake, Canada agrees to pay for all costs incurred by the Algonquins of Barriere Lake.

Quebec and Canada agree to reimburse the Algonquins of Barriere Lake, up to an amount of $338,00 costs related to the subject of the present Agreement incurred by them prior to the signing of this agreement. The Algonquins of Barriere Lake recognize having already received to that effect an amount of $55,000 by Quebec and an amount of $182,000 by Canada. The reimbursement of the remaining amount, that is $101,000 shall be made in equal shares by Quebec and Canada within 30 days of the signing of this Agreement by all parties, on submission of invoices.

4. Each of the parties will appoint a special representative mandated to represent them within the framework of the trilateral process. The parties guarantee that their respective representatives will have sufficient authority to make decisions and to apply the provisions of the present Agreement in accordance with the sharing of responsibilities provided for in section 6. The parties agree to appoint their representatives within the three days following the signing of this agreement.

5. The special representatives of Quebec and of the Algonquins of Barriere Lake will supervise

the work of the task force appointed to identify, within the perimeter of the territory specified in article 2, measures to harmonize the conduct of forestry activities with the traditional activities of the Algonquins of Barriere Lake, as well as the sensitive zones which should be protected more especially in a provisional manner. The special representatives when deemed possible, obvious and necessary may extend outside of the latter one or some sensitive zones identified within the study area specified in article 2. This is the task force that was mentioned in the letter of August 27, 1990, addressed to Mr. Jean-Meaurice Matchewan by Messrs. Albert Cote and John Ciaccia and it will include the members to be identified by the Algonquins of Barriere Lake.

The special representatives shall forthwith upon being appointed develop detailed terms of reference for the task force.

The task force will make a report by [originally August 15 and corrected to] November 30, 1991 to the special representatives containing recommendations for the provisional protection (up to the end of the process) of the sensitive zones and the territory so as to minimize the impact of forestry activities on the traditional activities of the Algonquins of Barriere Lake.

6. a) The special representatives appointed, pursuant to section 4, by the three parties must:
   1) supervise the trilateral process and ensure that it functions efficiently;
   2) guarantee constant liaison and cooperation between them and the technical personnel, the political representatives and the senior officials;
   3) develop a practical process and a work plan to make the trilateral process work;
   4) identify the financial requirements for the smooth functioning of the trilateral process.

b) The special representatives of Quebec and of the Algonquins of Barriere Lake must:
   1) identify the studies and inventories that are required to be made;
   2) identify requirements in expertise and professional services;
   3) develop detailed terms of reference for, and supervise the work of, the task force contemplated in section 5;
   4) formulate a draft integrated management plan and recommendations for the carrying out of the plan as required in section 2; and
   5) formulate recommendations to Quebec and to the Algonquins of Barriere Lake concerning the follow-up required on the report submitted by the task force

contemplated in section 5.

7. The decisions related to the works contemplated in section 6 a) of this Agreement are reached by consensus of the special representatives of the three parties.

The decisions related to the works contemplated in section 6 b) of this Agreement are reached by consensus of the special representatives of Quebec and the Algonquins of Barriere Lake.

Both Quebec and the Algonquins of Barriere Lake agree to examine seriously the recommendations contemplated in paragraphs 4 and 5 of section 6 b) that will be submitted to them by the special representatives and to negotiate an agreement on the carrying out of the recommendations retained.

8. The work calendar for the special representatives is as follows:

- at the latest on [originally August 15 and corrected to] November 30, 1991:
  submission of the report of the task force mentioned in section 5 regarding the provisional measures in the sensitive zones and the territory;
- at the latest on [originally September 15 and corrected to] December 15, 1991:
  recommendations by the special representatives of Quebec and the Algonquins of Barriere Lake regarding follow-up on the task force report;
- Spring of 1994:
  tabling of a draft integrated management plan for renewable resources;
- Autumn of 1994:
  recommendations by the special representatives of Quebec and the Algonquins of Barriere Lake regarding the carrying out of the draft integrated management plan for renewable resources.
  beginning of negotiations between Quebec and Algonquins of Barriere Lake in view of an agreement on the carrying out of the recommendations retained.

9. Nothing in this Agreement or annexes prejudices the rights of each of the parties.

Nothing in this Agreement or annexes is to be interpreted as creating, recognising or denying rights under section 35 of the Constitution Act of 1982.

10. This Agreement is binding on the parties and shall be in force when signed by all the parties.

It will terminate on May 26, 1995.

SIGNATURES

Chief Jean-Maurice Matchewan, Algonquins of Barriere Lake
Christos Sirros, Gaston Blackburn, Albert Cote and Gil Remillard, Quebec
Monique Landry, Canada

APPENDIX M

Joint Stewardship Agreement between
The Xax'lip First Nation
and
Her Majesty the Queen
In right of the Province of British Columbia (the Province)

Whereas: The Xax'lip First Nation asserts aboriginal rights, title, and interests with respect to their traditional territory;

The Xax'lip First Nation and the province agree that the matter of aboriginal rights, titles and interests can best be settled through the Treaty Commission process.

the Xax'lip First Nation has primary responsibility for the maintenance of Xax'lip values and traditions and the well-being of Xax'lip people;

the Xax'lip people have accepted the unique responsibilities bestowed upon them by the Creator, to serve for all time as custodians of the lands, waters and resources of the Xax'lip traditional territory;

the Xax'lip First Nation and the Province wish to recognize and protect a way of life that is based on an economic and spiritual relationship between the Xax'lip people and their traditional territory;

the Xax'lip First Nation and the Province wish to achieve agreement respecting their relationship with one another regarding their respective roles in the management of land, waters [added] and resources in the Xax'lip traditional territory; and

the Xax'lip First Nation and the Province wish to establish joint stewardship arrangements which will seek consensus on decisions respecting land, waters [added] and resources in the Xax'lip traditional territory.

Therefore be it resolved that:

1.0 Scope:

1.1 In this agreement, traditional territory means that area outlined on the map attached as appendix A which area is asserted by the Xax'lip First Nation as the traditional territory of the Xax'lip People.

1.2 This agreement shall apply to the traditional territory.

1.3 This agreement shall apply to any license, permit, or other disposition and the use of land, water and resources in the traditional territory, including, but not limited to the following uses:

1.3.1 road construction and maintenance,
1.3.2 mining exploration and development,
1.3.3 harvesting of resources, including fish and wildlife, and forests
1.3.4 uses of water, including hydroelectric projects
1.3.5 dispositions of land, including fee simple interest from crown grants,
1.3.6 telecommunications,
1.3.7 research projects,
1.3.8 public utilities, including public utility corridors, and
1.3.9 such other matters as the parties may agree to from time to time

2.0 Joint Stewardship

2.1 The parties intend to develop detailed joint stewardship arrangements respecting the matters set out in 1.3.

2.2 The detailed joint stewardship arrangements shall:

2.2.1 increase Xax'lip First Nation involvement in dispositions of land and resources in the traditional territory,
2.2.2 integrate the traditional knowledge of the Xax'lip people with the technical knowledge existing in government and the Xax'lip First Nation,
2.2.3 recognize the decision making process of the Xax'lip First Nation in structuring the participatory processed for resource decision making,
2.2.4 provide notification and information to the Xax'lip First Nation on proposed dispositions of land and resources in the traditional territory as necessary for the Xax'lip First Nation to make an informed decision,
2.2.5 seek the Xax'lip First Nation position with respect to the proposed disposition in the traditional territory,

2.2.6 provide structures and processes which will seek to reach a consensus between the Xax'lip First Nation and government within a reasonable period of time on proposed dispositions of land, water and resources in the traditional territory,

2.2.7 provide a joint dispute resolution mechanism to resolve disputes respecting land, water and resource dispositions in the traditional territory,

2.2.8 enable the parties to respond to applications for the disposition of land, water and resources in the traditional territory within a reasonable period of time.

2.3 The parties shall take steps to encourage the Government of Canada to participate in this agreement.

3.0 Advisory Committee:

3.1 To assist in developing the detailed joint stewardship arrangements, within seven (7) days of the signing of this agreement, the Province and the Xax'lip First Nation shall establish a resource management advisory committee to make recommendations to the Xax'lip First Nation and the Province on the details for the joint stewardship arrangements between the parties.

3.2 The advisory committee shall consist of four members, two of whom shall be appointed by the Xax'lip First Nation and two of whom shall be appointed by the Province.

3.3 The parties shall consult each other regarding their respective nominees.

3.4 The Province will provide Fifteen Thousand Dollars ($15,000.00) to the Xax'lip First Nation in the form of a contribution agreement to support the Xax'lip First Nation's participation in the advisory committee.

3.5 The advisory committee shall report to the parties within three (3) months of the signing of this agreement.

3.6 The parties may agree to engage a facilitator to assist the advisory committee in performing its function.

3.7 The costs of the facilitator, up to a maximum of $5,000.00, shall be borne by the Province.

3.8 The coordinating Ministry of the Province's nominees on the advisory committee shall be the Ministry of Aboriginal Affairs.

3.9 The advisory committee shall endeavour to operate on a consensus basis.

3.10 The meetings of the advisory committee shall take place, to the extent applicable, in the Xax'lip First Nation traditional territory.

3.11 The advisory committee shall conduct their deliberations in a manner that facilitates a free exchange of ideas in searching for solutions that maximize the best interests of both parties.

3.12 Positions advanced and solutions proposed by each advisory committee representative shall be without prejudice to the parties who nominated them.

3.13 The advisory committee shall make recommendations on:

3.13.1 guidelines, criteria and timelines for the review of dispositions of land, water and resources in the traditional territory,

3.13.2 means of providing the Xax'lip First Nation with necessary information on applications for the disposition of land, water and resources in the traditional territory,

3.13.3 means of providing effective participation by the Xax'lip First Nation (and other First Nations as appropriate) in the review of government legislation, regulations, policies and programs respecting the use of land, water and resources,

3.13.4 the adequacy of the existing resource information data available on the traditional territory,

3.13.5 means of recognizing the decision making process of the Xax'lip First Nation in structuring participatory processes for resource decision making,

3.13.6 means of integrating the traditional knowledge of the Xax'lip people with the technical knowledge existing in government and the Xax'lip First Nation,

3.13.7 developing education initiatives to increase the parties' mutual understanding of their respective resource decision making processes,

3.13.8 what mechanisms are most appropriate for the effective participation of the Xax'lip First Nation on the various applications for the disposition of land, water and resource interests in the traditional territory,

3.13.9 achieving coordinated community based, effective and efficient processes for reviewing dispositions of land, water and resources in the traditional territory,

3.13.10 the most appropriate joint dispute resolution mechanisms to resolve disputes respecting land, water and resources in the traditional territory, 3.13.11 the resources required and available to support the effective participation of the Xax'lip First Nation in joint stewardship arrangements.

3.13.12 the resources required and available to the Province to implement the recommendations,

3.13.13 such other issues related to the land, water and resources as the advisory committee deems appropriate.

3.14 The parties agree to establish such structures and processes as are necessary to implement the recommendations of the advisory committee which are approved by the parties.

4.0 Without prejudice.

4.1 This agreement shall not prejudice any aboriginal rights, titles or interests of the Xax'lip First Nation, nor any treaty rights, that may be negotiated for the Xax'lip First Nation.

Signed at the Fountain Valley
July 6th, 1992

Chief Roger Adolph (For the Xax'lip First Nation)
Honourable Andrew Petter, Minister of Aboriginal Affairs (For the Province).

Memorandum of Understanding

between
Xax'lip First Nation
and
Her Majesty the Queen
In right of the
Province of British Columbia (the Province)
on Joint Natural Resource Initiatives

1.0 Objective:

1.1 To foster employment and training opportunities for the Xax'lip people associated with the management of natural resources within the Xax'lip First Nation traditional territory.

1.2 To develop cooperative resource management initiatives within the Xax'lip First Nation traditional territory.

2.0 Resource Management Plan:

Phase I

2.1 The Province and the Xax'lip First Nation shall jointly undertake the development of an Integrated Resource Management Plan for the Xax/lip First Nation traditional territory.

2.2 The project shall be divided into two phases. Phase I will commence July 15, 1992 and will consist of the following:

  2.2.1 collation of existing inventories and resource plans for all the Province's Ministries,

  2.2.2 review of resource management and use of the traditional territory by the Xax'lip First Nation,

  2.2.3 integration of traditional Xax'lip First Nation resource data, and

  2.2.4 development of the terms of reference for Phase II of the Resource Management Plan by the Province and the Xax'lip First Nation.

2.3 The budget for Phase I shall be $50,000 comprised of contributions of $25,000 each from the Ministry of Forests and the Ministry of Aboriginal Affairs.

2.4 The Ministry of Aboriginal Affairs contribution shall fund the Xax'lip First Nation participation in Phase I.

Phase II

2.5 The terms of reference referred to in 2.2.4 shall be negotiated by the parties to this Memorandum of Understanding.

2.6 The terms of reference shall include:

- 2.6.1 timelines for completion of the plan,
- 2.6.2 a process for public involvement
- 2.6.3 a process for the review of existing resource users, and
- 2.6.4 the projected costs of conducting Phase II including the identification of resources to support the Xax'lip First Nation participation.

3.0 Forestry Initiatives:

Employment:

3.1 Subject to budgetary approval, the Ministry of Forests shall employ 4 native persons during the summer of 1992 under its Native Orientation Program in Lillooet District.

3.2 The Ministry of Forests and other Ministries as appropriate and the Xax'lip First Nation will cooperate in facilitating the training and development of Xax'lip First Nation members so that they will have access to the employment opportunities set out in 3.1 and 3.3.

Economic Opportunities:

3.3 Subject to budgetary approval, the Ministry of Forests shall enter into contracts with the Xax'lip First Nation in the Fountain Valley to carry out the following:

- 3.3.1 roadside slashing,
- 3.3.2 fence building and repairing
- 3.3.3 slashing stock trails,
- 3.3.4 burning landings,
- 3.3.5 grass seeding,
- 3.336 maintaining recreation sites, docks, ski trails, and
- 3.3.7 silviculture

3.4 After September, 1992, the Ministry of Forests shall, in accordance with Section 18 of the Forest Act, and upon receipt of an application by the Xax'lip First Nation, offer a timber sale license of up to 2000 m3 in the Xax'lip First Nation traditional territory to the Xax'lip First Nation, for training purposes.

3.5 The Ministry of Forests shall assist the Xax'lip First Nation in applying for Small Business Enterprise Program Sales. In particular, a value added S.B.F.E.P. sale of approximately 120,000 m3 over 4 years in the Lillooet T.S.A. to be offered for sale in January, 1993.

3.6 The Ministry of Forests shall make best efforts to facilitate discussions between the Xax'lip First Nation and Ainsworth Lumber Ltd. with respect to contract, employment and joint opportunities.

3.7 The Ministry of Economic Development, Small Business and Trade and the Xax'lip First Nation shall jointly undertake a feasibility study to review the Xax'lip First Nation proposal to utilize logging wood waste in value added manufacture.

3.8 The Ministry of Economic Development, Small Business and Trade shall contribute $20,000 to the feasibility study.

4.0 Fish and Wildlife Initiatives:

4.1 The Ministry of Environment, Lands and Parks shall undertake, in consultation with the Xax'lip First Nation, the following projects in the Xax'lip First Nation traditional territory:

4.1.1 spawner enumeration, and

4.1.2 stream improvement

4.2 The combined budget for the projects set out in 4.1 shall not exceed $20,000

4.3 The projects described in 4.1, shall provide 2 months employment for three Xax'lip First Nation members to be selected jointly by the Ministry and the First Nation.

4.4 The Ministry of Environment, Lands & Parks and the Xax'lip First Nation shall explore opportunities for First Nation involvement in:

4.4.1 enhancement of the mule deer range,

4.4.2 development of wildlife inventories, and

4.4.3 supplemental student training for technical and enforcement fields.

5.0 General

5.1 The Ministry of Economic Development, Small Business and Trade, through Regional Development Personnel, will assist the Xax'lip First Nation and Xax'lip First Nation members in:

5.1.1 identifying business opportunities,

5.1.2 developing business and community development plans,

5.1.3 applying for financial and business assistance from existing federal and provincial programs, including DINA's, CEIC, DFO co-management incentives program and any provincial business assistance program,

5.1.4 providing business training seminars,

5.1.5 providing community leadership training, and

5.1.6 providing community development workshops.

5.2 The parties will explore other opportunities in agriculture and aquaculture.

5.3 The parties will investigate potential federal programs to assist these initiatives, including Forest Canada's program to support First Nation forest management.

Signed at the Fountain Valley
July 6th, 1992

Chief Roger Adolph (For the Xax'lip First Nation)
Honourable Andrew Petter, Minister of Aboriginal Affairs (For the Province)

Joint Undertaking with respect to the Fountain Valley Road
between
The Xax'lip First Nation
and
Her Majesty the Queen
In right of the
Province of British Columbia (the Province)

Whereas: the parties have entered into a Joint Stewardship Agreement and a Memorandum of Understanding on Joint Natural Resource Initiatives, and

the parties wish to achieve an interim arrangement respecting access on the Fountain Valley Road

The parties agree that:

1.0 This undertaking will come into effect on the date of signature of the Joint Stewardship Agreement and the Memorandum of Understanding on Joint Natural Resource Initiatives.

2.0 Subject to 3.0 and unless otherwise agreed by the parties, this undertaking will continue in force until a permanent agreement has been reached between the Xax'lip First Nation and the Province with respect to the Fountain Valley Road.

3.0 In the event that the technical advisory committee, established pursuant to 3.0 of the Joint Stewardship Agreement, fails to report to the parties within three (3) months of the signing of the Joint Stewardship Agreement, or in the event that Joint Stewardship arrangements are not entered into thereafter, this undertaking shall terminate notwithstanding 2.0, unless the parties agree to an extension.

4.0 This undertaking is without prejudice to the question of the ownership and jurisdiction of the Fountain Valley Road as it traverses Xax'lip First Nation reserves in the traditional territory.

5.0 The public shall have access to use the Fountain Valley Road.

6.0 The parties agree to monitor the traffic on the Fountain Valley Road commencing on the date of signature of this undertaking.

7.0 Within three (3) months of the signing of this undertaking the parties shall review existing Xax'lip First Nation bylaws and interests with respect to the Fountain Valley Road and the laws of general application which apply to the Fountain Valley Road with a view to standardizing them to the satisfaction of the parties, including such measures required for implementation. The review shall consider the results of the monitoring set out in 7.0.

8.0 Unless otherwise agreed to by the parties, construction and maintenance on the Fountain Valley Road shall be in accordance with the agreement dated October 16, 1990 between the Xax'lip First Nation and the Ministry of Highways and Transportation, attached as Appendix A to this undertaking.

9.0 the Xax'lip First Nation agree to remove all "Private Road" signs within the Fountain Valley Road right of way.

10.0 The parties shall participate in negotiations in an attempt to reach a permanent agreement with respect to the ownership and jurisdiction of the Fountain Valley Road.

11.0 This undertaking is without prejudice to any aboriginal rights, titles or interests of the Xax'lip First Nation.

Signed at the Fountain Valley
July 6th, 1992

Chief Roger Adolph (For the Xax'lip First Nation)
Honourable Andrew Petter, Minister of Aboriginal Affairs (For the Province)

APPENDIX N
WILDLIFE HARVESTING AND MANAGEMENT
GWICH'IN TRIBAL COUNCIL RENEWABLE RESOURCES BOARD

COMPREHENSIVE LAND CLAIM AGREEMENT
BETWEEN
HER MAJESTY THE QUEEN IN RIGHT OF CANADA
AND
THE GWICH'IN
AS REPRESENTED BY
THE GWICH'IN TRIBAL COUNCIL

12. WILDLIFE HARVESTING AND MANAGEMENT

12.8 RENEWABLE RESOURCES BOARD

12.8.1 (a) A Renewable Resources Board shall be established to be the main instrument of wildlife management in the settlement area. The Board shall act in the public interest.

(b) The Board shall be established by virtue of settlement legislation at the date thereof.

(c) Wildlife shall be managed in the settlement area in accordance with this agreement, including its objectives.

12.8.2 (a) Where, by legislation, any other renewable resources board ("the new board") is established having jurisdiction in an area within the Mackenzie Valley which includes the settlement area:

(i) the new board shall assume the powers and responsibilities of the Board;

(ii) the Board shall merge with and become a regional panel of the new board. The regional panel shall be reduced to five members of which two shall be nominees of the Gwich'in Tribal Council;

(iii) the regional panel shall exercise the powers of the Board except that where, in the opinion of the new board, any decision or recommendation may affect renewable resources in an area within the jurisdiction of the new board outside the settlement area, the decision or recommendation shall be made by the new board. At least one member of the new board making such a decision or recommendation shall be a nominee of the Gwich'in Tribal Council; and

(i) decisions of the regional panel shall be decisions of the new board and subject to review by the Minister in the same manner as decisions of the Board.

(b) The Gwich'in Tribal Council shall be consulted with respect to any such legislation.

Establishment and Structures

12.8.3 The Board shall consist of seven members appointed as follows:

(a) six members and six alternate members to be appointed jointly by the Governor in Council and Executive Council of the Government of the Northwest Territories ("Executive Council"), of whom three members and three alternate members shall be appointed from nominees put forward by each of the Gwich'in and government, provided that the Board shall include at least one resident of the Northwest Territories who is not a participant; and

(b) a chairperson, resident in the settlement area, to be nominated by the members of the Board appointed under (a) and appointed jointly by the Governor in Council and Executive Council.

12.8.4 (a) Board members shall not be considered to have a conflict of interest by reason only of being public servants or employees of Gwich'in organizations.

(b) Each member shall, before entering upon his or her duties as such, take and subscribe before an officer authorized by law to administer oaths, an oath in the form set out in schedule III to this chapter.

12.8.5 In the event that the Board does not recommend a chairperson within 90 days after the other members of the Board are appointed, the Minister of Indian Affairs and Northern Development jointly with the Minister of Renewable Resources of the Government of the Northwest Territories shall, after consultation with the Board, recommend a chairperson to the Governor in Council and Executive Council.

12.8.6 Should any party fail to nominate members to the Board within 90 days of the date of settlement legislation, the Governor in Council and Executive Council may jointly appoint any persons to complete the Board.

12.8.7 Should a member resign or otherwise leave the Board, the body which nominated that member shall nominate a replacement within 90 days.

12.8.8 A vacancy in the membership of the Board does not impair the right of the remainder to act.

12.8.9 Each member shall be appointed to hold office for a specific term not to exceed five years. A member may be reappointed.

12.8.10 A member may be removed from office at any time for cause by the Governor in Council and Executive Council after consultation with or at the request of the body which nominated the member.

Administration and Procedure

12.8.11 The Board may make by-laws:

(a) respecting the calling of meetings of the Board; and

(b) respecting the conduct of business at meetings of the Board, including in-camera meetings, and the establishment of special and standing committees of the Board, the delegation of duties to such committees and the fixing of quorums for meetings of such committees.

12.8.12 A majority of the members from time to time in office constitutes a quorum of the Board.

12.8.13 The Board shall have, subject to its approved budget, an Executive Director and such staff, professional and technical advisors and consultants as are necessary for the proper conduct of its affairs.

12.8.14 The Board shall be accountable to government for its expenditures.

12.8.15 It is intended that there be no duplication in the functions required for the public management of wildlife.

12.8.16 The Board shall prepare an annual budget, subject to review and approval by government. The approved expenses of the Board shall be a charge on government. Such budget shall be in accordance with the Government of Canada's Treasury Board guidelines and may include:

(a) remuneration and travel expenses for attendance of Board members at board and committee meetings;

(b) the expenses of public hearings and meetings;

(c) a budget for research, public education and other programs as may be approved by government from time to time; and

(d) the expenses of staff, advisors and consultants and of the operation and maintenance of the office.

12.8.17 The annual budget of the Board in its first year of operation shall be set out in the implementation plan.

12.8.18 The Board may make rules respecting the procedure for making applications, representations, and complaints to it, including the conduct of hearings before it, and generally respecting the conduct of any business before it.

12.8.19 The Board shall have the powers of a commissioner under part I of the *Inquiries Act*, R.S. 1985, .I-11. The Board may not, however, subpoena Ministers.

12.8.20 The Board may consult with government, communities, the public and with Renewable Resources Councils and may do so by means of informal meetings or public hearings.

12.8.21 (a) A public hearing may be held by the Board where the Board is satisfied that such a hearing is desirable.

(b) A public hearing shall be held when the Board intends to consider establishing a total allowable harvest and a Gwich'in Needs Level in respect of a species or population of wildlife which has not been subject to a total allowable harvest level within the previous two years.

12.8.22 A public hearing may be held at such place or places within the settlement area as the Board may designate.

Powers of the Renewable Resources Board

12.8.23 In furtherance of its purpose as the main instrument of wildlife management in the settlement area, the Board shall have the power to:

(a) establish policies and propose regulations in respect of:

- (i) the harvesting of wildlife by any person, including any class of persons;
- (ii) the commercial harvesting of wildlife; and
- (iii) commercial activities relating to wildlife including:
  - (A) commercial establishments and facilities for commercial harvesting; propagation, cultivation and husbandry of fur bearers and other species; and commercial processing, marketing and sale of wildlife

and wildlife products, which may include trade with persons not included in 12.4.16;

(B) guiding and outfitting services; and

(C) hunting, fishing and naturalist camps and lodges;

(b) exercise the powers and duties given to it elsewhere in the agreement;

(c) approve plans for the management and protection of particular wildlife populations, including transplanted wildlife populations and endangered species, and particular wildlife habitats including conservation areas, territorial parks and national parks in the settlement area;

(d) approve the designation of conservation areas and endangered species;

(e) approve provisions of interim management guidelines, park management plans and policies that impact on wildlife and harvesting by the Gwich'in in a national park;

(f) approve regulations which may be proposed by government pursuant to 12.8.29, except for those in respect of which the Board has already made a final decision under 12.8.27;

(g) establish rules and procedures for the carrying out of any consultation required by these provisions; and

(h) review any matter in respect of wildlife management referred to it by government.

12.8.24 (a) Unless the Minister directs otherwise, the Board shall forward all its decisions, except those made pursuant to 12.4.7, to the Minister, accompanied by draft regulations, where the Board proposes regulations.

(b) Unless the Minister directs otherwise, all decisions of the Board, except those made pursuant to 12.4.7, shall be confidential until the process in 12.8.25 has been completed, or the time provided for the process has expired.

12.8.25 The Minister may, within 60 days of the receipt of a decision under 12.8.24, accept, vary or set aside and replace the decision. The Minister must consider the same factors as were considered by the Board and in addition may consider information not before the Board, and matters of public interest not considered by the Board. Any proposed variation or replacement shall be sent back to the Board by the Minister with written reasons.

12.8.26 The Minister may extend the time provided in 12.8.25 by 30 days.

12.8.27 (a) The Board shall, within 30 days of the receipt of a variation or replacement from the Minister pursuant to 12.8.25, make a final decision and forward it to the Minister with written reasons.

(b) The Minister may extend the time provided under (a).

12.8.28 The Minister may, within 30 days of receipt of a final decision of the Board accept or vary it, or set it aside and replace it, with written reasons. The Minister may consider information not before the Board on matters of public interest not considered by the Board.

12.8.29 Government shall, as soon as practicable, implement:

(a) all decisions of the Board which are accepted by the Minister under 12.8.25;

(b) all decisions of the Minister under 12.8.28; and

(c) subject to (a) and (b), all decisions of the Board after the expiry of the time provided in 12.8.25 and 12.8.28.

12.8.30 Government may make changes of a technical nature only, not going to substance, to any decision or final decision of the Board, without varying or setting aside and replacing the decision or final decision, provided the Board is advised of any such change.

Licensing and Enforcement

12.8.31 The Boards shall not issue licences, or hear and decide applications for individual commercial undertakings, or enforce legislation, unless otherwise agreed by government and the Gwich'in.

Advisory Powers

12.8.32 Government may consult the Board on any matter which will likely impact on wildlife or wildlife habitat in the settlement area and shall seek the timely advice of the Board on the following matters:

(a) draft legislation respecting wildlife or wildlife habitat;

(b) land use policies or draft legislation which will likely impact on wildlife or wildlife habitat;

(c) proposed inter-provincial or international agreements which will likely impact on wildlife, wildlife harvesting or wildlife habitat;

(d) the establishment or new national parks and territorial parks;

(e) plans for public education on wildlife, wildlife harvesting and wildlife habitat;

(f) policies respecting wildlife research and the evaluation of wildlife research in the settlement area;

(g) plans for cooperative management and research relating to species and populations not wholly within the settlement area, such as the Porcupine caribou herd; and

(h) plans for training Gwich'in in management of wildlife and related economic opportunities.

12.8.33 The Board shall provide any advice to government under 12.8.32 within such reasonable time as government requires, failing which, government may proceed without any such advice.

12.8.34 The Minister may request the Board to exercise a power described in 12.8.23 and the Board shall comply with the request within such reasonable time as the Minister requires.

12.8.35 If urgent circumstances require an immediate decision respecting matters referred to in 12.8.23 or 12.8.32, the Minister or his designated agent may make an interim decision and take such action as required to implement the interim decision without receiving a decision or advice from the Board. The Minister shall advise the Board forthwith of the interim decision made or action taken and the reasons therefor and direct the Board to review the decision made or action taken and render its decision or advice in accordance with this agreement.

12.8.36 The Board may:

(a) advise the Minister or government of any matter relating to wildlife or wildlife habitat at any time whether or not the Minister or government has requested such advice; and

(b) request the parties to this agreement to review any of its provisions.

Research and Harvesting Studies

12.8.37 It is intended that the Board and government departments and agencies work in close collaboration, and exchange full information on their policies, programs and research.

12.8.38 The Board may participate in harvesting studies, in data collection and in the evaluation of wildlife research. It is intended that the Board have an independent research capability, to the extent agreed by government and which does not duplicate research which is otherwise available to it.

12.8.39 The Board shall establish and maintain a public file for reports, research papers and data received by the Board. Any material furnished on a confidential basis shall not be made public without the consent of the originator.

12.8.40 Wildlife research or harvesting studies conducted in the settlement area by government, or by the Board, or with government assistance, shall directly involve Renewable Resources Councils and Gwich'in harvesters to the greatest extent possible.

12.8.41 Notwithstanding 12.5.2 and until the Board exercises its powers or carries out its duties under 12.8.23, legislation and government policies in effect from time to time shall continue to apply.

12.9 RENEWABLE RESOURCES COUNCILS

12.9.1 There shall be a Renewable Resources Council in each Gwich'in community to encourage and promote local involvement in conservation, harvesting studies, research and wildlife management in the local community.

12.9.2 A Renewable Resources Council shall be composed of not more than seven persons who are residents of the local community.

12.9.3 A Renewable Resources Council shall be established by the designated Gwich'in organization in the community.

12.9.4 A Renewable Resources Council shall have the following powers:

(a) to allocate any Gwich'in Needs Level for that community among local participants;

(b) to manage, in a manner consistent with legislation and the policies of the Board, the local exercise of Gwich'in harvesting rights including the methods, seasons and location of harvest;

(c) to establish group trapping areas, as defined in legislation, subject to the approval of the Board;

(d) to exercise powers given to Renewable Resources Councils under this agreement; and

(e) to advise the Board with respect to harvesting by the Gwich'in and other matters of local concern within the jurisdiction of the Board.

12.9.5 The Board shall consult regularly with Renewable Resources Councils with respect to matters within the Board's jurisdiction. Government and the Board may jointly delegate authority to Renewable Resources Councils, upon terms and conditions established by government and the Board.

12.9.6 Renewable Resources Councils shall participate in the collection and provision, to government and the Board, of local harvesting data and other locally available data respecting wildlife and wildlife habitat.

12.10 OTHER PROVISIONS

12.10.1 Government shall consult with the Gwich'in Tribal Council with respect to the formulation of government positions in relation to international agreements which may affect wildlife or wildlife habitat in the settlement area, including negotiations with respect to methods of harvesting and amendments to the *Migratory Birds Convention* (1916), prior to adopting positions.

12.10.2 (a) Persons who reside in the Mackenzie Valley or the Western Arctic Region and who held General Hunting Licences as at the date of settlement legislation may continue to harvest in the settlement area in accordance with legislation pertaining to such licences.

(b) Any participant who held a General Hunting Licence as at the date of settlement legislation may continue to hold such licence and shall be permitted to harvest outside the settlement area in accordance with legislation pertaining to such licences.

Schedule I to Chapter 12

TERMS OF REFERENCE: SETTLEMENT AREA HARVEST STUDY

The terms of reference for the Settlement Area Harvest Study (the "Harvest Study") pursuant to 12.5.6 of the agreement are as follows:

PURPOSE

The purpose of the Harvest Study is to provide information on harvesting necessary for the effective management of wildlife by the Board and government, including determination of the Gwich'in Minimum Needs Level pursuant to 12.5.8.

CO-OPERATIVE SPIRIT

The Harvest Study is a joint venture of the Gwich'in and government who commit themselves to work in a co-operative spirit.

RESPONSIBILITY

The Board shall be responsible for the design and the conduct of the Harvest Study. The Board shall establish a Working Group, composed of equal representation of the Gwich'in and the agencies with wildlife management responsibilities in the study area, to support the Harvest Study.

METHODOLOGY AND DESIGN

The Working Group shall develop the methodology and design of the Harvest Study which shall be approved by the Board. The Harvest Study will provide for training of community field workers, education of the respondents regarding the importance of the Harvest Study, and the involvement of community organizations.

SCOPE

The Harvest Study shall cover all Gwich'in and others who harvest in the settlement area for those species designated in the Harvest Study.

SCHEDULING

The Harvest Study shall be initiated within one year of the establishment of the Board and shall be conducted for a minimum of five consecutive years.

DATA SHARING

The data shall be recorded in a manner that ensures harvester confidentiality. All information collected, whether in its raw form or after being compiled and analyzed, with the exception of identification of the harvesters, shall be provided to the Board, the Gwich'in Tribal Council and the participating government agencies on the Working Group in a manner to be set out in the design of the Harvest Study.

FUNDING

It is acknowledged that adequate funding is required for the Harvest Study to yield meaningful data and that such funding must be identified before the study is initiated. The budget for the Harvest Study shall be set out in the implementation plan.

Schedule II to Chapter 12

The right of first refusal to purchase an enterprise pursuant to 12.7.6 shall operate as follows.

(i) Where the owner of an enterprise wishes to sell the enterprise or any part thereof ("the asset"), the owner shall notify the Gwich'in Tribal Council in writing of the asset, the selling price of the asset, the terms of sale and any other relevant details and conditions which a reasonable, informed purchaser would require. The owner shall provide a reasonable opportunity to inspect the asset.

(ii) The notification in (i) shall constitute an offer to sell the asset to the Gwich'in Tribal Council upon the terms and conditions specified in the notification.

(iii) The Gwich'in Tribal Council shall have 30 days from the date of receipt of notification to indicate whether it wishes to exercise its right of first refusal.

(iv) If it wishes to exercise the right of first refusal, the Gwich'in Tribal Council shall have 120 days from the date of receipt of notification to accept the offer after which time the offer shall lapse. The owner may extend the time in which the Gwich'in Tribal Council may accept the offer.

(v) Where the Gwich'in Tribal Council notifies the owner that it does not intend to exercise its right of first refusal, fails to notify an owner of its intention within the time limit specified in (iii) or fail to meet the requirements in (iv), the right of first refusal shall lapse, and the owner shall be free, within three years of the lapse of the offer in (iv), to sell the asset to another person, provided that the selling price and any terms and conditions are at least equivalent to the price and terms and conditions offered to the Gwich'in Tribal Council in (ii).

(vi) The owner may not sell the asset to a person other than the Gwich'in Tribal Council at a price less than the selling price or under significantly different terms and conditions than set out by the owner pursuant to (i) unless the owner sets a new selling price or new terms and conditions pursuant to (i). Where a new selling price or new terms and conditions are set pursuant to (i), the right of first refusal shall apply to such selling price and such terms and conditions in accordance with these provisions.

(vii) Where the owner fails to sell the asset within three years of the lapse of the offer in (v), the owner may not sell the asset without a further notification pursuant to (i).

(viii) Where the Gwich'in Tribal Council does not exercise its right of first refusal in respect of the purchase of all or part of an enterprise in (i), it shall not have a right of first refusal to take up a new licence issued in respect of the enterprise where such licence is associated with the sale of all or part of the enterprise pursuant to (v).

Schedule III to Chapter 12

OATH OF MEMBER OF THE RENEWABLE RESOURCES BOARD

I do solemnly affirm (or swear) that I will faithfully, truly, impartially and honestly, and to the best of my judgement, skill and ability, execute and perform the duties required of me as a member of the Board.

APPENDIX O

GWICH'IN TRIBAL COUNCIL FOREST RESOURCES MANAGEMENT

COMPREHENSIVE LAND CLAIM AGREEMENT
BETWEEN
HER MAJESTY THE QUEEN IN RIGHT OF CANADA
AND
THE GWICH'IN
AS REPRESENTED BY
THE GWICH'IN TRIBAL COUNCIL

13. FORESTRY

13.1.1 In this chapter,

"Board" means the Renewable Resources Board.

13.1.2 Subject to the provisions of this chapter, the Gwich'in have the right to harvest trees, including dead trees, throughout the settlement area at all seasons of the year for the following purposes:

(a) firewood for personal use;

(b) the construction of camps for hunting, trapping and fishing for personal use;

(c) handicrafts and traditional, cultural and medicinal uses;

(d) the construction of boats and rafts for personal uses; and

(e) house building for personal use.

13.1.3 The Gwich'in right to harvest trees is subject to legislation in respect of forest management, land management within local government boundaries, conservation, public health, public safety, and protection of the environment from significant damage.

13.1.4 The Gwich'in right to harvest trees set out in this agreement does not apply:

(a) subject to 12.4.11(c), on lands held in fee simple, subject to an agreement for sale or surface lease;

(b) upon Crown lands where it conflicts with the carrying out of any activity authorized or permitted by government such as timber licence or land use permit;

(c) in national parks except as permitted by the provisions of chapter 15; and

(d) on lands described in 12.4.12(a).

13.1.5 The Gwich'in may dispose of harvested trees by way of trade with other Gwich'in for the purposes described in 13.1.2.

13.1.6 The commercial harvesting of trees throughout the settlement area is subject to legislation.

13.1.7 (a) No new licence for the commercial harvesting of trees shall be granted without the consent of the affected Renewable Resources Council where such commercial harvesting would significantly affect the harvesting of wildlife by the Gwich'in.

(b) The affected Renewable Resources Council shall be consulted by government prior to any change in the area of operation of an existing licence.

(c) On application by an interested party, or on its own motion, the Board may review the decision of a Renewable Resources Council under (a) not to consent to such commercial harvesting and may permit such harvesting if the Board determines that it is reasonable, in the circumstances, to do so.

13.1.8 Nothing in this agreement shall be construed to:

(a) confer rights of ownership of trees except on Gwich'in lands;

(b) guarantee the supply of trees;

(c) preclude persons who are not participants from harvesting trees on lands other than Gwich'in lands, subject to legislation; or

(d) entitle Gwich'in to any compensation for damage to or loss of trees or harvesting opportunities on lands other than Gwich'in lands.

13.1.9 The Board shall have the power to

(a) establish policies and propose regulations in respect of

(i) the harvesting of trees by any person, including any class of persons; and

(ii) the commercial harvesting of trees; and

(b) approve forest conservation and forest management plans and policies within the settlement area which may include

(i) determination of areas of commercial harvesting of trees and the terms and conditions of such harvesting which may include cutting rates, yields, reforestation measures and Gwich'in employment and training;

(ii) provisions for forest management agreements with licenses and owners; and

(iii) provision for the establishment of fire attack zones.

13.1.10 Government may consult the Board on any matter which affects forestry and forest management and shall seek the timely advice of the Board on the following matters:

(a) draft legislation respecting forestry and forest management including the fighting and control of forest fires;

(b) land use policies or draft legislation which will likely impact on forestry or forest management;

(c) policies respecting forestry and forest management research and the evaluation of such research; and

(d) plans for training Gwich'in in forestry, forest management and lumbering.

13.1.11 Nothing in this agreement is intended to affect the responsibility of government for the fighting of forest fires in the settlement area.

APPENDIX P

PORCUPINE CARIBOU MANAGEMENT BOARD

Porcupine Caribou Management Agreement

THIS AGREEMENT made on the 26 day of October, 1985

BETWEEN:

The Government of Canada, as represented by the Minister of Indian Affairs and Northern Development and the Minister of the Environment, (hereinafter referred to as "Canada");

- and -

Government of Yukon, as represented by the Minister of Renewable Resources, (hereinafter referred to as "Yukon");

- and -

The Government of the Northwest Territories, as represented by the Minister of Renewable Resources, (hereinafter referred to as "GNWT");

- and -

The Council For Yukon Indians, (hereinafter referred to as "CYI");

- and -

The Inuvialuit Game Council, (hereinafter referred to as "IGC");

- and -

The Dene Nation and the Métis Association of The Northwest Territories, (hereinafter referred to as the "Dene/Métis").

WHEREAS the Porcupine Caribou Herd within Canada historically migrates across the boundary between Yukon and the Northwest Territories;

AND WHEREAS the continued well-being of the Porcupine Caribou Herd and the maintenance of its habitat require co-ordinated management, good will and co-operation between Governments and the traditional users of these caribou;

AND WHEREAS the parties hereto recognize the value of these caribou to Canada generally and that a special relationship exists between native users and these caribou;

NOW THEREFORE THIS AGREEMENT WITNESSETH that the Government parties hereto, under their respective authorities to enter into agreements of this kind, agree to act within their legislative authorities for the management of Porcupine Caribou and the protection and maintenance of Porcupine Caribou habitat, in a co-operative manner together with the other parties to this Agreement, to give effect to its terms as follows:

A. DEFINITIONS

In this Agreement:

1. "Allowable harvest" means that level of harvest of the Porcupine Caribou Herd in Canada as set pursuant to the terms of this Agreement.
2. "Board" means the Porcupine Caribou Management Board established herein.
3. "Conservation" means the management and use of Porcupine Caribou and its habitat which best ensures the long term productivity and usefulness of the Herd for present and future generations.
4. "Habitat" means the whole or any part of the biosphere upon which the Porcupine Caribou Herd depends, including all of the land, water and air that it inhabits, crosses or utilizes at any time.
5. "Harvest" means to shoot, kill, harm, capture, trap, or collect for any purpose, or to attempt to engage in such activities.
6. "Management" means the method and procedures which are necessary to ensure the health and protection of the Porcupine Caribou Herd and the maintenance of its habitat, which may include but are not limited to the following activities associated with wildlife and land management: law enforcement, research census-taking, monitoring, public information, education and functions provided for in this Agreement.
7. "Minister(s)" means the appropriate responsible Minister of the Government of Canada, Government of Yukon or Government of the Northwest Territories.
8. "Native user" means a person whose entitlement to the subsistence harvest of Porcupine Caribou has been recognized by a native user community and who is:
    - (a) an aboriginal person who is a traditional user of the Porcupine Caribou or the descendant of such a person; or
    - (b) an aboriginal person who is a current user of the Porcupine Caribou at the time of signing this Agreement and meets a reasonable residency requirement satisfactory to his native user community; or
    - (c) a Canadian aboriginal person who has not traditionally or currently

harvested the Porcupine Caribou but meets a reasonable residency requirement satisfactory to the Board.

9. "Native User Community" means any one of the communities of Old Crow, Dawson, Mayo, Fort McPherson, Arctic Red River, Aklavik, Inuvik, or Tuktoyaktuk and may also include such other new communities as may be determined through native user agreements in effect from time to time. The native users within these communities shall be represented by a Chief and Band Council, a Hunters and Trappers association or other appropriate native leadership body, including those bodies defined through the comprehensive land claims process.

10. "Parties" means the parties to this Agreement and may include their successors or assigns, as defined through the comprehensive land claims process or otherwise.

11. "Porcupine Caribou" means members of that herd of barren ground caribou which regularly bears its young in north-eastern Alaska and north-western Yukon and historically moves southward within Alaska, Yukon and the Northwest Territories for the winter. Its Canadian range, the limits of which are defined within Yukon by current Yukon game management subzones, is generally depicted for Yukon and the Northwest Territories on the map attached as Appendix 1 to this Agreement.

12. "Preferential Right" means the right to harvest Porcupine Caribou for subsistence usage and to be allocated, subject to conservation and the terms of this Agreement, quantities of Porcupine Caribou sufficient to fulfil the native users' requirements for subsistence usage before there is any allocation for other purposes, such right of allocation being provided for by the establishment, when necessary, of the allocation hereinafter referred to as the "native user allocation".

B. OBJECTIVES OF THE PARTIES

1. To co-operatively manage, as a herd, the Porcupine Caribou and its habitat within Canada so as to ensure the conservation of the Herd with a view to providing for the ongoing subsistence needs of native users;

2. To provide for the participation of native users in Porcupine Caribou Herd management;

3. To recognize and protect certain priority harvesting rights in the Porcupine Caribou Herd for native users, while acknowledging that other users may also share the harvest;

4. To acknowledge the rights of native users as set out in this Agreement; and

5. To improve communications between Governments, native users and others with regard to the management of the Porcupine Caribou Herd within Canada.

C. ESTABLISHMENT OF THE PORCUPINE CARIBOU MANAGEMENT BOARD

1. The Government parties to this Agreement shall establish a Board, to be known as the Porcupine Caribou Management Board, to provide advice and recommendations to the Ministers.

2. Subject to paragraph 3(f) of this Part:
   - (a) The Board will always include representation from each of the parties to this Agreement;
   - (b) The Board will always contain equal Government and native representation and equal representation of native users from Yukon and the Northwest Territories.

3. Eight voting members shall be appointed within a reasonable time to the Board, as follows:
   - (a) Canada shall appoint one member to represent Canada;
   - (b) (i) Yukon shall appoint two members to represent Yukon;
     - (ii) CYI shall nominate two members to represent the native users of Old Crow, Dawson, and Mayo;
   - (c) (i) GNWT shall appoint one member to represent GNWT;
     - (ii) The Dene/Métis shall nominate one member to represent the Dene/Métis native users of Aklavik, Inuvik, Fort McPherson and Arctic Red River;
     - (iii) IGC shall nominate one member to represent the Inuvialuit native users of Aklavik, Inuvik and Tuktoyaktuk;
   - (d) Upon receipt of notification from the parties, the Ministers shall confirm the nominations and appointments as required;
   - (e) The members of the Board shall be appointed for a term of five years, subject to the right of the parties to terminate the appointment of their respective appointees at any time and have Board members reappointed in accordance with the above terms of reference;

   - (f) If, within a reasonable time, nominations or appointments are not made as provided for in this paragraph, the Board may discharge its responsibilities with those members who have been nominated or appointed.

4. (a) A majority of the members of the Board shall nominate from outside the membership of the Board a Yukon resident as the first Chairman and shall notify the Ministers accordingly;

(b) The Board shall determine criteria for the nomination of subsequent Chairmen;

(c) If agreement on nomination of a Chairman cannot be reached within a reasonable time, any party to this Agreement may refer the matter to a Judge of the Supreme Court of the Yukon Territory acting as an arbitrator under the provisions of the Arbitration Ordinance and if the Court shall not provide a Judge, then to an arbitrator under the provisions of the Arbitration Ordinance;

(d) The majority of the members of the Board shall confirm the acceptability of the Chairman as nominated and shall notify the Ministers of its confirmation;

(e) The Chairman shall have tenure for a term of five years and may, with the approval of the Board, serve additional terms;

(f) Upon receipt of notification from the Board, the Ministers shall confirm the appointment or dismissal of Chairmen as required.

D. DUTIES OF THE BOARD

1. The Board shall establish and maintain communication with the native users of the Porcupine Caribou, between the native users of the Porcupine Caribou , between native users and Governments, among Governments and with other users, in order to assist in co-ordinated management and conservation of Porcupine Caribou and its habitat.

2. The Board shall determine the actions that are necessary to achieve the objectives described herein and shall recommend them to the Minister.

3. The Board shall hold such public meetings as are reasonably necessary to report on and discuss with native users and others its findings and recommendations and, in any event, shall inform the native user communities in writing of the Board's recommendations to the Minister.

4. The Board shall review technical and scientific information relevant to the management of the Porcupine Caribou Herd and its habitat and may advise the Minister of its adequacy.

5. The Board shall encourage native users and other harvesters of Porcupine Caribou to participate in the collection of statistics and biological information.

6. The Board shall maintain a list of eligible native users for each native user community and up-to-date information on the sub-allocation of the native user allocation among communities, all of which shall be made available to Governments for management purposes.

E. RECOMMENDATIONS OF THE BOARD

Without restricting the generality of Part D of this Agreement, the parties agree that the Board may do the following:

1. The Board may make recommendations to the Minister on any matter affecting the Porcupine Caribou and its habitat, including recommendations related to the making of policy, legislation and regulations regarding:
   (a) management strategies for the Porcupine Caribou Herd;
   (b) a herd management plan for the Porcupine Caribou Herd;
   (c) guidelines for native users' participation in Porcupine Caribou Herd management plans;
   (d) training required to enable native users to participate in the management of the Porcupine Caribou Herd and the conservation of its habitat;
   (e) a predator management plan in respect of the Porcupine Caribou Herd, provided that no such plan shall be put into effect until the Minister has consulted with the Board;

2. The Board may also:
   (a) review and recommend development of Porcupine Caribou research proposals;
   (b) review available information and recommend further research where there appears to be a need;
   (c) review and recommend methods of data collection and presentation;
   (d) review the conservation and management of the Porcupine Caribou Herd and its habitat and make appropriate recommendations so as to ensure that productivity is maintained; and,
   (e) recommend criteria according to which non-native subsistence users may qualify to share in the native user allocation from the Porcupine Caribou Herd, if the affected native user community approves.

3. (a) Because of the dependence of caribou on its habitat, the Board may make

recommendations to other boards and agencies, as well as to the Minister, on land use planning and land management throughout the Canadian range of the Porcupine Caribou Herd or any portion of it. Recommendations of measures to ensure the conservation and protection of habitat shall include, but are not limited to, measures related to specific projects, plans or activities which may:

(i) impede, delay or disrupt Porcupine Caribou movements, affect behavioral patterns, or reduce productivity;

(ii) affect Porcupine Caribou habitat; or

(iii) affect interactions between native users and Porcupine Caribou;

(b) The Board may also identify sensitive habitat areas requiring special protection and recommend measures to protect such areas.

F. MINISTER'S RESPONSIBILITIES

1. The Minister shall consider the recommendations of the Board and report his decisions or comments in a timely manner. The Minister shall, within thirty days of receipt of recommendations, either provide the Chairman with his response or, where he is not able to respond fully, he shall so inform the Chairman and advise him when his full response will be provided. When advised by the Board that an emergency situation has arisen and that a decision on a recommendation is necessary forthwith, the Minister shall govern himself accordingly.
2. The Minister may consult with the Board on any matter related to the Porcupine Caribou and its habitat.
3. Recommendations of the Board shall be submitted in writing to the Minister.
4. If the Minister disagrees with a recommendation or any part thereof, he shall refer the matter back to the Board for reconsideration with due consideration for any time schedule imposed by any statutory or regulatory requirements.
5. Where, as the result of a matter being referred back to the Board recommendations are submitted, the Minister may accept or reject the recommendations in whole or in part.
6. Where the Minister rejects a recommendation in whole or in part, he shall provide the Board with reasons therefor.
7. Where it appears to the Minister that an emergency situation has arisen which affects the well being of the Porcupine Caribou or its habitat, and where time does not permit consultation with the Board, the Minister may take such action as is

necessary before consulting with the Board.

8. Where emergency action has been taken pursuant to paragraph 7 above, the Minister shall forthwith inform the Chairman and solicit the continuing advice of the Board.

G. PROCEEDINGS OF THE BOARD

The Board shall establish and make known, from time to time, rules and procedures for its functioning, provided, however, that:

(a) thirty days notice of meetings shall be given by mail, telephone, telegram or other appropriate means;

(b) the Board shall establish its own quorum;

(c) decisions of the Board shall be by consensus wherever possible, and shall always require a majority vote in favour, with each member having one vote;

(d) the Board may decide that alternates be appointed to represent members when they are unable to attend Board meetings and shall establish the terms and conditions of the appointments. If it is decided that alternates are necessary, the parties shall each appoint alternates forthwith according to the terms provided for the appointment of Board members in Part C of this Agreement;

(e) the Chairman shall, in the event of a deadlock or tie vote, be responsible for resolving the disagreement of the Board and shall, where necessary, cast the deciding vote on any issue which cannot otherwise be resolved;

(f) the Board shall hold formal meetings at least twice yearly unless it decides otherwise;

(g) the Board shall keep summary minutes and records of all its meetings and circulate them to its members;

(h) the Board may establish and instruct such committees as it deems necessary to carry out its functions.

H. BOARD SECRETARIAT

There shall be a secretariat to administer the operations of the Board which shall be responsible to the Board under the direction of the Chairman. The secretariat shall receive and distribute information, prepare and circulate minutes of Board meetings and perform such other functions as the Board requires.

I. FINANCES

1. Subject to the terms and conditions of this Agreement and to funds being appropriated by legislative authority on an annual basis, the Government parties shall fund reasonable costs of the Board and Secretariat in equal portions and in such amounts as agreed annually, to ensure the Board and Secretariat functioning in a manner herein stated.

2. For further clarity, particular expenditures of the Board which are to be shared by the funding parties may include:
   - (a) any salary or honorarium, and all travel, accommodation and related expenses incurred while working on Board activities, paid to the Chairman, provided that same is in accordance with Treasury Board guidelines;
   - (b) the production of an annual report and its distribution;
   - (c) a modest technical review capability in respect of primary research conducted by Governments and other sources;
   - (d) the production of information or educational material, such as newsletters; and
   - (e) such other costs as the funding parties may agree upon.

3. The Government parties shall be responsible for any salary or honorarium, and all travel, accommodation and related expenses of their Board members. In addition, Yukon shall be responsible for these expenses related to the participation of the Board members for CYI and GNWT shall be responsible for these expenses related to the participation of the Board members for IGC and the Dene/Métis.

4. The Board shall prepare and submit annual budgets for all expenditures under its control to the appropriate Government parties and shall be accountable for the expenditures of the Board and secretariat.

5. The Board shall account annually for all monies received and disbursed by the Board and secretariat and records of this accounting shall be made available to any of the parties to this Agreement for inspection upon thirty days written notice to the Chairman.

J. ALLOCATIONS OF ANNUAL ALLOWABLE HARVEST IN CANADA

1. Any of the parties to this Agreement may provide the Board with information that will, in the opinion of the submitting party, assist the Board in determining its recommendation of the annual allowable harvest from the Porcupine Caribou

Herd.

2. (a) After the Board has considered all relevant information, the Chairman shall submit its report to the Ministers to facilitate the enactment of any necessary regulations.

(b) The report of the Board may include, but is not restricted to, recommendations related to the following:

- (i) annual allowable harvest;
- (ii) categories and priorities of harvest allocations;
- (iii) methods of harvest;
- (iv) areas of harvest;
- (v) means of access
- (vi) seasons;
- (vii) age and sex of Porcupine Caribou to be harvested; and
- (viii) research study requirements related to the harvest.

(c) In determining the native user allocation the Board shall take into account, among other things, the following criteria:

- (i) food and clothing requirements of the native users;
- (ii) usage patterns and levels of harvest by the native users;
- (iii) ability of caribou and other wildlife populations to meet the subsistence requirements of the native users; and
- (iv) projections of changes in caribou populations.

(d) The Board may also include in its report the appropriate principles, considerations and procedures that should be used in order to calculate a total annual allowable harvest and its allocations, and more generally to define the conservation limit for the harvest of the Porcupine Caribou Herd.

(e) If the Porcupine Caribou Herd is healthy and of sufficient numbers to satisfy all reasonable competing needs, the Board may recommend that the setting of an annual allowable harvest is not required.

3. The territorial Governments shall, upon taking into consideration the recommendations of the Board and consistent with the preferential right of native users to harvest:

(a) establish the total annual allowable harvest of Porcupine Caribou in Canada; and

(b) determine the allocation of the annual allowable harvest in Canada for native users, taking into account the criteria set forth in paragraph 2(c) of this Part and the reservation of two hundred and fifty (250) Porcupine Caribou referred to in paragraph 4 below.

4. Taking into consideration the interests of other users, the territorial Governments shall allocate as they see fit from that portion of the annual allowable harvest not allocated under paragraph 3(b) of this Part, which shall consist of no fewer than two hundred and fifty (250) Porcupine Caribou, and shall regulate harvesting pursuant to their respective legislative authorities..

5. (a) The native users shall sub-allocate the native user allocation among themselves on a community basis.

(b) The details of the sub-allocation shall be provided to the Board annually by CYI, IGC and the Dene/Métis on behalf of the native user communities represented by them respectively so that the necessary information will be available for management purposes.

(c) The respective hunting areas for native user communities are identified on the map attached as Appendix II to this Agreement.

(d) When access to its community hunting area has been granted by a native user community to a native user or users from another community, notice in a form acceptable to the appropriate Governments shall be provided.

6. Where a sub-allocation of Porcupine Caribou is made to the native users of Dawson and Mayo, the Yukon Wildlife Management Board (that is referred to in the Yukon Indian Agreement-in-Principle) and Yukon shall be so informed by the Board.

7. The parties recognize the respective responsibilities of the Yukon Wildlife Management Board for all wildlife south of 65°30' in Yukon and of the Porcupine Caribou Management Board as set out in this Agreement. Therefore, in territorial game management subzones or parts thereof, where the Hart River and Wernecke Caribou or other herds in Yukon mix with the Porcupine Caribou, Yukon may, on the advice of and in consultation with the appropriate board(s), take the necessary measures to protect these herds that mix with the Porcupine Caribou Herd for such periods of time as are required.

8. The parties recognize the special dependence of all native users on the Porcupine Caribou and in particular, the unique dependence of the native users of Old Crow on the Porcupine Caribou.

K. THE RIGHTS OF NATIVE USERS

1. The rights of native users as set out in this Agreement are subject to laws of general application with regard to conservation and public safety.

2. Subject to the terms of this Agreement, native users shall have a preferential right to harvest Porcupine Caribou.

3. Native users shall have the right to harvest Porcupine Caribou without being required to pay fees or obtain licences, permits or tags except that licences, permits or tags may be required for conservation and management purposes. In such circumstances any such licences, permits and tags will be issued locally and without cost.

4. The Government parties to this Agreement shall use their best efforts to enact any laws and regulations to allow native users the right to transport lawfully harvested Porcupine Caribou across any jurisdictional boundary within the Canadian range of the Herd.

5. Native users shall have the right to employ traditional and current methods to harvest the Porcupine Caribou and the right to both possess and use all equipment reasonably necessary to exercise that right.

6. The development of lists of eligible native users shall be made in each native user community with the assistance of the appropriate native leadership body. These lists shall be provided to the Board annually by CYI, IGC and the Dene/Métis on behalf of the native user communities and shall be updated as required.

7. Notwithstanding paragraph 3 of this Part, native users may be required for conservation and management purposes to show evidence that they are native users.

L. COMMERCIAL HARVEST

1. There shall be no commercial harvest of Porcupine Caribou in Canada.

2. Notwithstanding paragraph 1 above, native users may:

   (a) barter or trade with other native users for caribou meat; and

   (b) subject of paragraphs 2(c) and 2(d) of this Part, sell caribou meat to other native users who are unable to hunt by virtue of age, illness or other disadvantages or where there is an emergency situation when access for the hunting of caribou is not feasible for a native user community, provided that the money received for the sale does not exceed the reasonable expenses incurred.

(c) The Board shall establish guidelines from time to time on:

  (i) the circumstances that qualify a native user as being disadvantaged, for example when a family does not have a provider;

  (ii) categories of costs which may be considered reasonable expenses;

  (iii) the circumstances that would create an emergency situation when access for the hunting of caribou is not feasible for a native user community.

(d) The Board shall establish procedures for the expeditious consideration of individual situations contemplated by paragraph 2(b) of this Part which do not fall within the guidelines established pursuant to paragraph 2(c) above.

3. Native users shall be permitted to sell the non-edible parts of legally harvested Porcupine Caribou.

4. This part does not apply to commercial guiding or outfitting activities.

M. INFORMATION

1. All parties to this Agreement agree to use their best efforts to provide the Board with all available information requested by it that is necessary to carry out its functions.

2. The Board may advise the parties on the adequacy of information provided to it by native users and others.

3. Subject to paragraph 4 of this Part, the Board shall provide available information upon request and may distribute its reports and recommendations to the public.

4. The Board will respect the confidentiality of such information provided to it on a confidential basis.

N. GENERAL

1. The parties hereto shall jointly and severely indemnify and save harmless the Board and the individual members thereof, against any and all liability, loss, damage, cost or expenses, which the Board, or its individual members jointly or severely incur, suffer or are required to pay as a consequence of any contract or other obligation lawfully undertaken in accordance with the terms of this

Agreement.

2. All public reports, summaries or other documentation prepared or otherwise completed by the Board shall become the joint property of all parties hereto and any and all income derived therefrom shall be jointly shared among the parties in proportion to the expenditures incurred by each party generating such income.

3. The parties hereto agree to be bound by this Agreement, notwithstanding subsection 14(2) of the **Northwest Territories Act**, R.S.C. 1970, and subsection 17(3) of the **Yukon Act**, R.S.C. 1970.

4. The Government parties to this Agreement will attempt to enact any laws and regulations that may affect the Porcupine Caribou Herd and its habitat in a manner consistent with this Agreement.

5. This Agreement may be amended following unanimous approval in writing by the parties hereto, and the Government parties agree to attempt to secure passage of any necessary legislation.

6. Those parties to this Agreement which are negotiating parties in comprehensive land claims shall act as soon as possible following the signing of this Agreement to incorporate this entire Agreement by reference, by means of sub-agreement or interim agreement, into the completed or ongoing Yukon Indian, Inuvialuit and Dene/Métis comprehensive land claims respectively. If any consequential amendments to existing sub-agreements, interim agreements or overall agreements are required as a result of the signing of this Agreement, they shall be made no later than the time of incorporation by reference referred to herein.

7. It is the intention of he parties to this Agreement that its provisions not be used to interpret or derogate from the provisions of any comprehensive land claims settlement and that the provisions of any comprehensive land claims settlement not be used to interpret the provisions of this Agreement.

8. In recognition of the fact that the Porcupine Caribou Herd is an international resource with a substantial part of its habitat in Alaska, the parties agree that it is desirable to negotiate a Porcupine Caribou bilateral agreement following the completion of this Agreement. In recognition of the fact that the provisions of a bilateral agreement might involve aboriginal and treaty rights within the meaning of the **Constitution Act, 1982**, as well as the legislative and management responsibilities of the territorial Governments and the porcupine Caribou Management Board in its role, Canada agrees to consult with the other parties to this Agreement prior to and during the course of any such bilateral agreement

negotiations.

9. For greater certainty, and pending compliance with paragraph 6 of this Part, as well as final settlement of the Yukon Indian, Inuvialuit, and Dene/Métis comprehensive land claims, it is intended that this Agreement shall come into full force and effect upon signature by the parties and that the Board shall carry out its functions in accordance with the terms of this Agreement.

APPENDIX Q

CHAPTER 10 - SPECIAL MANAGEMENT AREAS

UMBRELLA FINAL AGREEMENT

Between

The Government of Canada

The Council for Yukon Indians and

The Government of the Yukon

10.1.0 Objective

10.1.1 The objective of this chapter is to maintain important features of the Yukon's natural or cultural environment for the benefit of Yukon residents and all Canadians while respecting the rights of Yukon Indian People and Yukon First Nations.

10.2.0 Definitions

In this chapter, the following definitions shall apply.

"Special Management Area" means an area identified and established within a Traditional Territory pursuant to this chapter and may include:

(a) national wildlife areas;

(b) National Parks, territorial parks, or national park reserves, and extensions thereof, and national historic sites;

(c) special Wildlife or Fish management areas;

(d) migratory bird sanctuaries or a wildlife sanctuary;

(e) Designated Heritage Sites;

(f) watershed protection areas; and

(g) such other areas as a Yukon First Nation and Government agree from time to time.

10.3.0 Establishment of Special Management Areas

10.3.1 Provisions in respect of an existing Special Management Area may be set out in a Yukon First Nation Final Agreement.

10.3.2 Special Management Areas may be established in accordance with the terms of this chapter pursuant to a Yukon First Nation Final Agreement or pursuant to Laws of General Application.

10.3.3 Except as provided in a Yukon First Nation Final Agreement, where Government proposes to establish a Special Management Area, Government shall refer the proposal to the affected Renewable Resources Council for its review and recommendations.

10.3.4 Government may refer proposals to establish historic territorial parks, national historic sites administered by the Canadian Parks Service or to designate Heritage Sites as Designated Heritage Sites to the Heritage Resources Board established pursuant to 13.5.0 instead of the affected Renewable Resources Council for its review and recommendations.

10.3.5 A Special Management Area may not include Settlement Land without the consent of the affected Yukon First Nation.

10.4.0 Rights and Interests of Yukon First Nations

10.4.1 Where a Special Management Area is proposed to be established which will adversely affect rights of a Yukon First Nation under a Settlement Agreement, Government and the affected Yukon First Nation shall, at the request of either party, negotiate an agreement to:

- 10.4.1.1 establish any rights, interests and benefits of the affected Yukon First Nation in the establishment, use, planning, management and administration of the Special Management Area; and
- 10.4.1.2 mitigate adverse effects of the establishment of the Special Management Area on the affected Yukon First Nation.

10.4.2 Agreements negotiated pursuant to 10.4.1:

- 10.4.2.1 shall address the rights Yukon Indian People have for Harvesting Fish and Wildlife within the Special Management Area;
- 10.4.2.2 may address the economic and employment opportunities and benefits for the affected Yukon First Nation;
- 10.4.2.3 may address whether, and on what terms, including provisions on management, Settlement Land may be included in the Special Management Area; and
- 10.4.2.4 may include such other provisions as Government and the affected Yukon First Nation may agree.

10.4.3 Where Government and the affected Yukon First Nation do not agree on the terms of an agreement pursuant to 10.4.1, the parties may refer the outstanding issues to the dispute resolution process under 26.4.0.

10.4.4 Where mediation under 10.4.3 does not result in agreement, the Government may establish the Special Management Area.

10.4.5 Notwithstanding 6.2.3.2, access by a Yukon Indian Person to a Special Management Area established pursuant to 10.4.4 for Harvesting Fish or Wildlife pursuant to a Settlement Agreement may be limited or prohibited only for reasons of Conservation, public health or public safety.

10.4.6 Government and the affected Yukon First Nation may, at any time after the establishment of a Special Management Area pursuant to 10.4.4, negotiate an agreement pursuant to 10.4.1 in respect of that Special Management Area, in which case 10.4.5. shall no longer apply to that Special Management Area.

10.4.7 Nothing in this chapter shall be construed to derogate from any provision respecting National Parks in the Yukon First Nation Final Agreements for the Champagne and Aishihik First Nations, the Kluane First Nation, the White River First Nation or the Vuntut Gwitch'in First Nation.

10.4.8 Any agreement concluded between Government and the affected Yukon First Nation pursuant to 10.4.1 may be amended according to the terms set out in that agreement.

10.4.9 Any agreement concluded between Government and the affected Yukon First Nation pursuant to 10.4.1 may be appended to and form part of that Yukon First Nation's Final Agreement if Government and the Yukon First Nation agree.

10.5.0 Management of Future Special Management Areas

10.5.1 Unless Government otherwise agrees, Government shall be the management authority for Special Management Areas on Non-Settlement Land.

10.5.2 Government shall prepare, or have prepared, a management plan for such Special Management Area pursuant to a Yukon First Nation Final Agreement after the Effective Date of that Yukon First Nation Final Agreement.

10.5.3 Government shall make best efforts to complete the management plan within five years of the establishment of the Special Management Area.

10.5.4 Government shall make best efforts to complete the management plan within five years of the establishment of the Special Management Area.

10.5.5 The management plan and any proposed amendments thereto shall be referred before approval to the relevant Renewable Resources Council or to the Yukon Heritage Resources Board, as the case may be, for its review and recommendations.

10.5.6 The provisions of 16.8.0 shall apply in respect of the implementation of any recommendations made pursuant to 10.5.5.

10.5.7 Should a management advisory body other than a body referred to in 10.5.5 be established by Government for the purpose of 10.3.3., 10.3.4 or 10.5.5, Yukon First Nation representation shall be 50 percent on any such body unless Government and the affected Yukon First Nation agree otherwise. Any such management advisory body shall have the responsibilities of a Renewable Resource Council or the Heritage Resources Board set out in this chapter.

10.5.8 Except as provided otherwise in this chapter, or in a Yukon First Nation Final Agreement, all National Parks and extensions, national park reserves and extensions and national historic parks and sites shall be planned, established and managed pursuant to the National Parks Act, R.S.C. 1985, c. N-14, other Legislation, the Canadian Parks Service policy and park management plans in effect from time to time.

10.5.9 Where a Special Management Area includes a National Park or its extension or national park reserve or its extension, exploration and development of non-renewable resources shall not be permitted, except in respect of the removal of sand, stone and gravel for construction purposes within the National Park or national park reserve.

10.5.10 Where a Special Management Area includes Yukon First Nation Burial Sites or places of religious and ceremonial significance to a Yukon First Nation, the management plan shall be consistent with the provisions of Chapter 13 - Heritage and shall provide for the protection and preservation of the sites or places.

10.6.0 Relationship to the Land Use Planning and Development Assessment Processes

10.6.1 Special Management Areas established after the effective date of Settlement Legislation shall be:

10.6.1.1 consistent with land use plans approved in accordance with Chapter 11 - Land Use Planning; and

10.6.1.2 subject to the provisions of Chapter 12 - Development Assessment.

10.7.0 Fish and Wildlife Management

10.7.1 Fish and Wildlife within Special Management Areas shall be managed in accordance with Chapter 16 - Fish and Wildlife.

APPENDIX R

MANAGEMENT OBJECTIVES

Canada-Alberta Partnership Agreement in Forestry
Forest Management Plan - Whitefish Lake First Nation
IR 155, 155A, 155B - March 16, 1994

5.0 MANAGEMENT OBJECTIVES

- Practice good stewardship of the forest resource and accommodate multiple use of the land-base.
- Maximize economic benefit from the forest on the Reserve.
- Maintain a reasonable level of sustainable development commensurate with sound forestry and environmental practices. Develop and implement a comprehensive, flexible and easy-to-apply strategy for forest operations.
- Protect the forest resource from fire and/or pest damage.
- Preserve traditional lands or sacred sites
- Protect ecologically sensitive areas and apply road-building and logging methods which are environmentally sound.
- Ensure forest renewal following logging disturbance.
- Rehabilitate understocked "productive" forest sites.
- Maintain or enhance "aesthetics".
- Provide permanent and/or seasonal employment to Band members in logging reforestation.
- Transfer some of the basic "technology" of forestry to Band members (e.g., orientation, timber-cruising, forest management and planning).
- Enhance wildlife populations by maintaining or increasing appropriate habitats.
- Develop a system for involving the public (i.e., Band members at large) and incorporating pertinent recommendations in the forest management process.

APPENDIX S

LANDUSE CATEGORIES

Canada-Alberta Partnership Agreement in Forestry
Forest Management Plan - Whitefish Lake First Nation
IR 155, 155A, 155B March 16, 1994

The following list is an example of land-use categories developed by Silvacom (1994) and the specific information required to evaluate the land-use.

Land-use	**Information Required**
agriculture	soils, drainage, slope present land-use vegetation cover
forestry	soils, drainage, slope forest cover types size classes stocking levels present land-use
commercial	soils, drainage, slope vegetation cover present land-use housing density proximity to commercial centers presence of major roads presence of sewer and water services
industrial	soils, drainage, slope vegetation cover present land-use proximity to major centers presence of major roads presence of rail transport presence of sewer and water services

forest recreation	soils, slope, drainage vegetation cover present land-use recreation resources proximity to major centers
water recreation	soils, drainage, slope vegetation cover present land-use length of shoreline
residential	soils, drainage, slope vegetation cover present land-use proximity to commercial centers presence of sewer and water services
residential recreation	soils, drainage, slope recreational resources length of shoreline

APPENDIX T

LETTER FROM TOLKO INDUSTRIES LTD. TO TRAPPER

Re. Trapline 918

Re.DTP S09 0001 Supplemental

This letter is to inform you that Whitefish Lake First nations Logging Ltd. is planning to conduct logging operations in the above mentioned trapline during the 1996/97 logging season. The map I have enclosed shows our proposed cut blocks colored in purple and orange. All existing access that we are planning to use is marked in a solid red line. All non existing roads are marked in a dotted red line.

We encourage you to contact us if you should have any questions or concerns. We would appreciate notification of any such concerns prior to March 30, 1995 so that we may further accommodate you where ever possible. In this manner, we may be able to incorporate your suggestions into our Annual Operating Plans.

Please communicate all inquiries to the undersigned at the address listed at the bottom of this page.

Sincerely,

TOLKO INDUSTRIES LTD.

cc. Fish & Wildlife Branch
Alberta Forest Service

APPENDIX U

PROFILE - WHITEFISH LAKE BAND

BAND INFORMATION **TREATY 8**

Reserves

Utikoomak Lake 155encompassing8,160 acres
Utikoomak Lake 155A
encompassing 2,572 acres
Utikoomak Lake 155B
encompassing 1,242 acres

11,974 acres

Accessible by road to 155 and 155B; water to 155A

As a result of recent Treaty Land Entitlement Settlement Agreement, approximately 5,500 acres are to be surveyed, which will be added to the Reserves by Order in Council.

Linguistic Characteristics

Algonquin Cree

Population (as of December 31, 1994)

On reserve	733
Off reserve	690
TOTAL	1,423

Chief and Council

Chief	Eddie Lawrence TALLMAN
Councillors	Robert James Jessie GREY
	Clifford David LABOUCAN
	Alfred Gilbert LABOUCAN
	Dwayne THUNDER

Administrator Albert Quinn

Method of Selecting Chief and Council

Band Custom

Term of Office 4 years. Expiry dates are staggered

Address and Telephone Number

General Delivery
ATIKAMEG, Alberta T0G 0C0
Telephone (403) 767-3914 FAX (403) 767-3814

MEMBER OF PARLIAMENT

MP Dave Chatters (REF)

Constituency Athabasca

Ottawa Office

Room 266, Wellington Building
House of Common
OTTAWA, Ontario K1A 0A6
(613) 996-1783

MEMBER OF THE LEGISLATURE OF ALBERTA

MLA Pearl Calhasen (PC)

Constituency Lesser Slave Lake

Constituency Office

5001-49 Street
or Answering Service
HIGH PRAIRIE, Alberta T0G 1E0
SLAVE LAKE, Alberta
(403) 523-3171
(403) 849-3479

Legislature Office

721 Legislature Annex
EDMONTON, Alberta T5K 1E4
(403) 427-1859

TRIBAL COUNCIL MEMBERSHIP

Keetaskeenaw (new Northern Alberta Tribal Council)

PROGRAMS ADMINISTERED BY THE BAND

Alternative Funding Arrangements

Community has expressed their intention to enter this process

Self-Government

Community has not expressed their intention to enter this process.

Capital Management

Economic Development

On-Reserve Businesses

- Sawmill
- School Bus
- Oil Service Company
- Forest Service Contract

Education

Atikameg kindergarten and teacherages

The Lesser Slave Lake Indian Regional Council provides the following educational services:

- Student transportation
- Band operated school funding
- Counselling (in-school)

Student support:

- Accommodation
- Financial assistance

Provincial schools

- Student supplies
- Education committees
- Post-secondary education

Policing

One Senior Band Constable, funding c/o Solicitor General of Canada

Social Development

- Social Assistance
- Child Care
- Adult Care (in home and institution)
- Community-based services

PHYSICAL INFRASTRUCTURE - Utikoomak Lake # 155

Community Buildings

- Various recreation buildings
- Various Public Works and utility buildings
- Band office
- Fire hall

Education

- School
- Teacherages

Municipal Services

- Water & sewer systems
- Water truck
- Sewage truck
- Garbage collections truck
- Fire truck
- 13.0 kilometres road
- Bridge

APPENDIX V

YUKON UMBRELLA FINAL AGREEMENT

RENEWABLE RESOURCE COUNCILS

16.6.0 **Renewable Resources Councils**

16.6.1 In each Yukon First Nation's Traditional Territory, a Renewable Resources Council shall be established as a primary instrument for local renewable resources management in that Traditional Territory as set out in a Settlement Agreement.

Composition of Councils

16.6.2 Subject to Transboundary Agreements and Yukon First Nation Final Agreements, each Council shall be comprised of six members consisting of three nominees of the Yukon First Nation and three nominees of the Minister.

16.6.3 Each Council shall determine its own procedures for selecting its chairperson from its membership. The Minister shall appoint the chairperson selected by the Council.

16.6,3.1 In the event that a Council fails to select a chairperson within 30 days of the position being vacant, the Minister shall appoint a chairperson from the membership of the Council after Consultation with the Council.

16.6.4 Unless otherwise provided in a Yukon First Nation Final Agreement, Council members shall be resident within that Traditional Territory.

16.6.5 Unless otherwise provided in a Yukon First nation Final Agreement, appointments to a Council shall be for a five year term, except for the initial appointments. One third of the initial appointments shall be made for three years, one third for four years, and one third for five years. Thereafter, the appointments shall be for five years. All appointments to the Council shall be during good behaviour.

16.6.6 Each Council shall make provisions for public involvement in the development of its decisions and its recommendations.

16.6.7 Each Council shall prepare an annual budget, subject to review and approval by Government. The budget shall be in accordance with Government guidelines and may include:

16.6.7.1 remuneration and travel expenses for attendance of Council members at Council meetings;

16.6.7.2 the costs of public hearings and meetings;

16.6.7.3 a budget for research review, public information and other activities; and

16.6.7.4 other items as the Council and Government agree on; and

the approved budget of the Council shall be a charge on Government.

16.6.8 The first annual budget for a Council and a multi-year financial forecast of its operation shall be set out in the implementation plan for that Yukon First Nation Final Agreement.

Powers and Responsibilities of Councils

16.6.9 Each Council, acting in the public interest and consistent with this chapter, may make recommendations to the Minister, the affected Yukon First Nation, the Board and the Sub-Committee on any matter related to Conservation of Fish and Wildlife.

156.6.10 Subject to Yukon First Nation Final Agreements, and without restricting 16.6.9, each Council:

16.6.10.1 may make recommendations to the Minister on the need for and the content and timing of Freshwater Fish and Wildlife management plans, including Harvesting plans, Total Allowable Harvests and the allocation of the remaining Total Allowable Harvest, for species other than the species referred to in 16.7.12.2;

16.6.10.2 may make recommendations to the Board regarding local management concerns for the species referred to in 16.7.12.2;

16.6.10.3 may make recommendations to the Salmon Sub-Committee on allocation of commercial and other uses of Salmon and on other matters designated in 16.7.17.12;

16.6.10.4 may identify and recommend to the Board harvest requirements, including harvest requirements within the adjusted Basic Needs Level, within guidelines established in Yukon First Nation Final Agreements;

16.6.10.5 may make recommendations to the Sub-Committee on the need for and the content and timing of Salmon management plans;

16.6.10.6 may establish bylaws under the *Wildlife Act*, R.S.Y. 1986, c. 178, in accordance with 16.11.0, for the management of Furbearers;

16.6.10.7 may make recommendations to the Minister and affected Yukon First

Nation on the management of Furbearers;

16.6.10.8 may make recommendations to the Minister and affected Yukon First Nation, in accordance with 16.11.0, on the use of traplines and the reassignment of all new, vacant and under-utilized traplines;

16.6.10.9 may make recommendations to the Minister on priorities and policies related to enforcement of Legislation and on alternatives to penal sanctions with respect to Fish and Wildlife;

16.6.10.10 may review and make recommendations to the Minister on allocation of and terms and conditions for commercial uses of Wildlife and Fish other than Salmon;

16.6.10.11 may review and make recommendations to the Minister on applications for research permits granted by Government for Fish and Wildlife management-related research activities within the relevant Traditional Territory; and

16.6.10.12 may make recommendations to the affected Yukon First Nation regarding the Yukon First Nation's management of Fish and Wildlife on its Settlement Land pursuant to 16.5.1.8.

16.6.11 Each Council shall be granted status and an interested party to participate in public proceedings of any agency, board or commission on matters that affect the Management and Conservation of Fish and Wildlife and their habitats within the relevant Traditional Territory for which that Council was established.

16.6.12 With the consent of the Minister and the affected Yukon First Nations, a Council may merge with other Councils to establish a regional Council with the same powers and responsibilities as a Council.

16.6.13 The Minister shall recommend to the Yukon Legislative Assembly an amendment to the *Wildlife Act*, R.S.Y. 1986, c. 178 to enable the Council to establish bylaws under the *Wildlife Act*, R.S.Y. 1986. c. 178 pursuant to 16.6.10.6.

16.6.14 Where the Minister proposes to implement a Total Allowable Harvest which would require the implementation of Basic Needs Level provisions for a species or population in a Traditional Territory in accordance with this chapter, the affected Council may make recommendations to the Minister on alternative measures that could be considered in the place of implementing the Basic Needs Level provisions.

16.6.15 Government shall provide Councils with the results of research under

16.6.10.11.

16.6.16 Where a Council does not carry out one of its responsibilities, the Minister, after giving notice to the Council, may undertake to fulfil that responsibility directly or delegate that responsibility to the Board.

16.6.17 Upon request by the Council, the Minister and the affected Yukon First Nation shall make available to the Council information in their possession reasonably required for the Council to carry out its functions under this chapter.

16.7.0 Fish and Wildlife Management Board

16.7.1 A Fish and Wildlife Management Board shall be established as the primary instrument of Fish and Wildlife management in the Yukon.

Composition of the Board

16.7.2 The Board shall be comprises of six nominees of Yukon First Nations and six nominees of Government.

16.7.3 The Board shall determine its own procedures for selecting its chairperson from its membership. The Minister shall appoint the chairperson selected by the Board.

16.7.3.1 In the event that the Board fails to select a chairperson within 60 days of the position being vacant, the Minister shall appoint a chairperson from the membership of the Board after Consultation with the Board.

16.7.4 The majority of representatives of Government and the majority of representatives of Yukon First Nations shall be Yukon residents.

16.7.5 Appointments to the Board shall be for a five year term, except for the initial appointments. One third of the initial appointments shall be made for three years, one third for four years, and one third for five years. Thereafter, the appointments shall be for five years. All appointments to the Board shall be during good behaviour.

16.7.6 The Board shall make provisions for public involvement in the development of its decisions and its recommendations.

16.7.7 The Board may establish an executive secretariat to provide administrative support to the Board.

16.7.7.1 The administrator of the secretariat shall be the executive secretary, who shall report to the Board and shall provide administrative and other support to the Board and maintain liaison with the Renewable

Resources Councils.

16.7.7.2 The Director of Fish and Wildlife for the Yukon shall serve as an advisor to the Board and shall ensure that technical support is provided to the Board.

16.7.8 The Board shall be accountable to Government for its expenditures.

16.7.9 The Board shall prepare an annual budget, subject to review and approval by Government. Such budget shall be in accordance with Government guidelines and may include:

16.7.9.1 remuneration and travel expenses for attendance of Board members at Board and Sub-Committee meetings;

16.7.9.2 the costs of public hearings and meetings;

16.7.9.3 a budget for research review, public information and other activities;

16.9.7.4 the costs of staff and of the operation and maintenance of the office; and

16.7.9.5 other items as the Board and Government agree upon; and

the approved budget of the Board and the Sub-Committee shall be a charge on Government.

16.7.10 The first annual budget for the Board and Sub-Committee and a multi-year financial forecast of the Board's and the Sub-Committee's operation shall be set out in the implementation plan for the Umbrella Final Agreement.

Powers and Responsibilities of the Board

16.7.11 The Board, acting in the public interest and consistent with this chapter and taking into consideration all relevant factors including recommendations of the Council, may make recommendations to the Minister, to Yukon First Nations and to the Councils, on all matters related to Fish and Wildlife management, Legislation, research, policies and programs.

16.7.12 Without restricting 16.7.11, the Board:

16.7.12.1 may recommend to the Minister policies for the management of Fish and Wildlife and their habitats;

16.7.12.2 may make recommendations to the Minister on the need for and the content and timing of all Yukon Fish and Wildlife management plans for species included in international agreements, threatened species or populations, species or populations declared by the Minister as being of a territorial, national, or international interest, and Transplanted

Populations and Exotic Species;

16.7.12.3 may review and make recommendations to the Minister and to Yukon First Nations on management plans recommended by the Councils, specifically the population goals and the management options contained within those plans;

16.6.12.4 may, where required by species or population management plans, recommend to the Minister a Total Allowable Harvest for a species listed in 16.7.12.2 in accordance with 16.9.0;

16.7.12.5 may review and recommend to the Minister adjustments to Basic Needs Levels in accordance with 16.9.8;

16.7.12.6 may make recommendations to the Minister on the need for, and on positions of, interjurisdictional agreements that affect the Conservation and Use of Fish and Wildlife resources in the Yukon;

16.7.12.7 after consultation with the affected Councils, may recommend to the Minister restrictions on methods and practices of harvest for reasons of conservation, public health, public safety and, in exceptional circumstances, for protection of the renewable resources economy associated with the Use of Fish or Wildlife resources;

16.7.12.8 may, at the request of the Council, assist a Council in the performance of its duties;

16.7.12.9 may, subject to approval of the Minister and the Council, delegate the performance of its responsibilities to a Council; and

16.7.12.10 may, in Consultation with the Councils and subject to Yukon First Nation Final Agreements, identify new opportunities and recommend to the Minister management measures for commercial uses of Fish and Wildlife.

16.7.13 The Board shall have standing as an interested party to participate in the public proceedings of any agency, board or commission dealing with matters that affect the Management and Conservation of Fish and Wildlife and their habitat in the Yukon.

16.7.14 The Board shall communicate to the Councils its recommendations and decisions approved in accordance with 16.8.0 within a reasonable time.

16.7.15 The Board shall meet not less than annually with the chairpersons of the Councils.

16.7.16 Before the amendment or introduction of Legislation for Fish and Wildlife in the Yukon, the Minister shall Consult with the Board on the matters to be addressed in that Legislation.